Fisheries &
Wildlife
Management
Division

RESOURCE STATUS AND
ASSESSMENT BRANCH

Proposed Protocols for Inventories of Rare Plants of the Grassland Natural Region

Alberta Species at Risk Report No. 21

Alberta

Proposed Protocols for Inventories of Rare Plants of the Grassland Natural Region

Cliff Wallis

Alberta Species at Risk Report No. 21

June 2001

SUSTAINABLE RESOURCE
DEVELOPMENT

Publication No. I/027
ISBN: 0-7785-1813-2 (Printed Edition)
ISBN: 0-7785-7808-6 (Online Edition)
ISSN: 1496-7219 (Printed Edition)
ISSN: 1496-7146 (Online Edition)

For copies of this report, contact:
Information Centre – Publications
Alberta Environment
Natural Resources Service
Main Floor, Great West Life Building
9920 – 108 Street
Edmonton, Alberta, Canada T5K 2M4

Telephone: (780) 422-2079

OR

Information Service
Alberta Environment
#100, 3115 – 12 Street NE
Calgary, Alberta, Canada T2E 7J2

Telephone: (403) 297-3362

OR

Visit our web site at:
http://www.gov.ab.ca/env/fw/status/reports/index.html

This publication may be cited as:

Wallis, Cliff. 2001. Proposed protocols for inventories of rare plants of the Grassland Natural Region. Alberta Sustainable Resource Development, Fish and Wildlife Service, Alberta Species at Risk Report No. 21 Edmonton, AB. 305 pp.

TABLE OF CONTENTS

1. INTRODUCTION 1

2. METHODS 1
  2.1 Prioritizing and Ranking Vascular Plant Species 1
    2.2.1 Defining Priority List of Taxa for Status Reports 1
    2.2.2 Ranking Species on the Priority List 2
    2.2.3 Implementation Considerations 3
    2.2.4 Key Steps in Preparing a Status Report for Vascular Plant Taxa 4

3. PROTOCOLS FOR PRIORITY SPECIES 2001-2003 5
  3.1 Evaluation Results -- Priorities for Status Reports 6
    3.1.1 Northern Fescue Grassland Natural Subregion 6
    3.1.2 Foothills Fescue Grassland Natural Subregion 8
    3.1.3 Mixed Grassland Natural Subregion 10
    3.1.4 Dry Mixed Grassland Natural Subregion 13

4. SUMMARY OF RECOMMENDATIONS FOR PROTOCOLS IN YEAR 2001-2005 17

5. COST ESTIMATES 17

6. LITERATURE CITED 17

7. PROTOCOLS AND ELEMENT OCCURRENCES 18

Allium geyeri Geyer's onion 18
Amaranthus californicus Californian amaranth 22
Ambrosia acanthicarpa bur ragweed 23
Anagallis minima (Centunculus minimus) chaffweed 26
Arabidopsis salsuginea mouse-ear cress 29
Aristida purpurea var longiseta red three-awn 30
Asclepias viridiflora green milkweed 32
Aster campestris meadow aster 33
Aster pauciflorus few-flowered aster 35
Astragalus kentrophyta var kentrophyta prickly milk vetch 42
Astragalus lotiflorus low milk vetch 44
Astragalus purshii Pursh's milk vetch 48
Atriplex canescens saltbush 53
Atriplex powellii Powell's saltbush 55
Atriplex truncata saltbush 57
Bacopa rotundifolia water hyssop 58
Bidens frondosa common beggarticks 59
Boisduvalia glabella smooth boisduvalia 62
Bromus latiglumis Canada brome 65
Calylophus serrulatus shrubby evening-primrose 66
Camissonia andina upland evening-primrose 69
Camissonia breviflora taraxia 70
Carex hystericina porcupine sedge 71
Carex nebrascensis Nebraska sedge 73
Carex retrorsa turned sedge 80
Carex parryana var parryana Parry's sedge 84
Castilleja cusickii yellow paintbrush 88

Castilleja lutescens stiff yellow paintbrush 94
Castilleja sessiliflora downy paintbrush 99
Cerastium brachypodum 100
Chenopodium desiccatum goosefoot 101
Chenopodium incanum goosefoot 103
Chenopodium subglabrum smooth narrow-leaved goosefoot 104
Chenopodium watsonii Watson's goosefoot 105
Coreopsis tinctoria common tickseed 106
Crepis occidentalis small-flowered hawk's-beard 109
Cryptantha minima small cryptanthe 113
Cuscuta gronovii common dodder 115
Cyperus schweinitzii sand nut-grass 116
Cyperus squarrosus awned nut-grass 118
Downingia laeta downingia 119
Draba reptans whitlow-grass 121
Elatine triandra waterwort 123
Eleocharis engelmannii Engelmann's spike-rush = *E. ovata* 124
Ellisia nyctelea waterpod 125
Elodea bifoliata 128
Elymus virginicus Virginia wild rye 130
Erigeron radicatus dwarf fleabane 132
Eriogonum cernuum nodding umbrella-plant 135
Festuca occidentalis western fescue 138
Fraxinus pennsylvanica green ash 140
Gentiana fremontii 141
Gratiola neglecta clammy hedge-hyssop 144
Halimolobos virgata halimolobos 146
Heliotropium curassavicum spatulate-leaved heliotrope 147
Hordeum pusillum little barley 148
Hymenopappus filifolius tufted hymenopappus 149
Iris missouriensis western blue flag 152
Juncus confusus few-flowered rush 156
Juncus nevadensis Nevada rush 162
Lilaea scilloides flowering-quillwort 163
Linanthus septentrionalis linanthus 165
Lobelia spicata spiked lobelia 167
Lomatogonium rotatum marsh felwort 168
Lupinus minimus least lupine 171
Lycopus americanus American water-horehound 173
Lysimachia hybrida 177
Marsilea vestita hairy pepperwort 180
Mertensia lanceolata lance-leaved lungwort 182
Muhlenbergia asperifolia scratch grass 185
Muhlenbergia racemosa marsh muhly 191
Munroa squarrosa false buffalo grass 193
Nothocalais cuspidata prairie false dandelion 195
Nuttallanthus canadensis field toad-flax 197
Oenothera flava low yellow evening-primrose 198
Onosmodium molle western false gromwell 201
Orobanche ludoviciana Louisiana broom-rape 205
Oryzopsis micrantha little-seed rice grass 207
Osmorhiza longistylis smooth sweet cicely 212
Oxytropis lagopus var conjugans hare-footed locoweed 215
Parietaria pensylvanica American pellitory 218

Picradeniopsis (Bahia) oppositifolia picradeniopsis 223
Plantago canescens western ribgrass 224
Polanisia dodecandra clammyweed 228
Polygonum polygaloides ssp confertiflorum Watson's knotweed 231
Potamogeton foliosus leafy pondweed 237
Potentilla finitima sandhills cinquefoil 240
Potentilla paradoxa bushy cinquefoil 241
Potentilla plattensis low cinquefoil 246
Psilocarphus elatior woollyheads 247
Quercus macrocarpa bur oak 252
Ranunculus glaberrimus early buttercup 253
Rorippa curvipes var truncata blunt-leaved yellow cress 258
Rorippa sinuata spreading yellow cress 259
Rorippa tenerrima slender cress 260
Ruppia cirrhosa widgeon-grass 261
Sagina decumbens 263
Shinnersoseris (Lygodesmia) rostrata annual skeletonweed 264
Sisyrinchium septentrionale pale blue-eyed grass 267
Spartina pectinata prairie cord grass 274
Spergularia salina salt-marsh sand spurry 276
Sphenopholis obtusata prairie wedge grass 280
Stephanomeria runcinata rush-pink 283
Suaeda moquinii Moquin's sea-blite 289
Suckleya suckleyana poison suckleya 291
Thelesperma subnudum var marginatum greenthread 292
Townsendia exscapa low townsendia 293
Tradescantia occidentalis western spiderwort 296
Tripterocalyx micranthus (Abronia micrantha) sand verbena 297
Veronica catenata water speedwell 300
Viola pedatifida crowfoot violet 302
Yucca glauca soapweed 305

1. INTRODUCTION

Several reports have been prepared on the status of Alberta's native plant species. More recently, non-vascular plants have been given some attention and tracking lists have been developed. There is a relatively good information base for rare vascular species but a very limited one for rare non-vascular plants.

Alberta Environment needs to develop a longer (3-5 year) term approach for understanding and prioritizing the research and habitat conservation needs with respect to rare plants. This report analyzes the vascular plant species and discusses potential approaches to research, monitoring and conservation of vascular and non-vascular plants in the Grassland Natural Region. There is a fundamental recognition that habitat or landscape level approaches are preferred but that some single species attention may still be required.

112 vascular plant species were selected for detailed analysis and preparation of protocols based on their distribution within the Grassland Natural Region.

2. METHODS

Building on the work previously undertaken by Cheryl Bradley, Joyce Gould and Cliff Wallis in developing rankings for vascular plants, the provincial Alberta Natural Heritage Information Centre database was re-analyzed to update the various fields and re-score the species (see 2.1). The existing fields included global status (GRank), provincial status (SRank), threats to habitat, and threats to population. A short habitat descriptor was also added that divided the habitats into major landscape types, e.g. grassland, sandy grassland, sand dune, slopes-badland, slopes-sandy, wetland, wetland-alkali, wetland-meadow, wetland-sandy, wetland-springs, woodland, and woodland-sandy.

Additonal information on the biogeographic distribution of the Great Plains species within the Great Plains region was also added to the data base. This included notations on whether the species was generally distributed in the Great Plains or more regionally restricted to the western or northwestern Great Plains or the glaciated portions.

2.1 Prioritizing and Ranking Vascular Plant Species

This section has been developed by the Rare Plant Technical Advisory Committee (Joyce Gould and Cheryl Bradley, pers. comm.) for ranking species for preparation of status reports. A similar approach is useful in determining priorities for research, monitoring and conservation.

2.2.1 Defining Priority List of Taxa for Status Reports

The Rare Plant Technical Advisory Committee produced a list of priority taxa for status reports. The following are criteria they used for producing a list of vascular plant taxa to be considered for status reports. Taxa considered are those currently being tracked by the Alberta Natural Heritage Information Centre (ANHIC). Species and subspecies of special conservation concern are tracked by ANHIC. Any of the criteria below would trigger or, in the case of Criteria I-4, reject, a "priority" ranking.

*Criteria I-1 Global rank * is < G3 and provincial rank* is < S3*
This criteria selects for taxa which are known from ≤ 100 occurrences globally as well as provincially. For many of these species a significant part of their global range is in Alberta. Very few of our grassland species meet this criterion.

Criteria I-2 Threats to known populations and habitat are considered under extreme (A) or moderate (B) threat and provincial rank is < S3
This criteria selects for taxa which are known from ≤ 100 occurrences provincially and which are assessed by the Alberta Vascular Plant Tracking List Committee as under extreme (A) to moderate (B) threat to population or habitat. Threats to population are defined as observed, inferred, or projected direct exploitation, harassment, or ecological interactions with predators, competitors, pathogens or parasites which may result in population declines. Threats to habitat are defined as observed, inferred, or projected habitat alterations (loss, conversion, degradation, or fragmentation) which may result in population declines. Extreme threats are significant, affect more than half the population, and are unmitigated. Moderate threats are also serious, but affect less than half the population or are mitigated by some level of human protection. The majority of "priority" species meet this criterion.

Criteria I-3 Populations in Alberta are widely disjunct from the centre of distribution of the taxa
This criteria selects for taxa with a population in Alberta that is widely separated from the species' centre of distribution outside Alberta. Disjunct populations are more likely to evolve to a separate taxon than contiguous populations and hence are of special concern for conservation. Disjuncts have not yet been identified and none of our "priority" species meet this criterion. This was not used to stratify the data.

Criteria I-4 There is significant taxonomic uncertainty (Q) with respect to the taxa
This criteria selects against taxa which are not clear taxonomically, as indicated by a "Q" in the global status designation. These taxa are removed from the priority list.

Global Rank	Provincial Rank	Definition of Rank
G1	S1	≤ 5 occurrences or only a few remaining individuals.
G2	S2	6-20 occurrences or with many individuals in few occurrences.
G3	S3	21-100 occurrences may be rare and local throughout its range, or in a restricted range (may be abundant in some locations or may be vulnerable to extirpation because of some factor of its biology).

Other codes: "T_" - rank for a subspecific taxon; " _?" - rank uncertain; "Q" – questionable taxon.

2.2.2 Ranking Species on the Priority List

Taxa on the priority list are ranked according to a number of additional criteria. The following are criteria used for ranking. Scores for individual criteria are weighted and combined to produce an overall ranking.

---

* Definition of Element Ranks used by ANHIC - Elements within the Alberta Natural Heritage Information Centre (ANHIC) database are evaluated and ranked on their status globally using a system developed by The Nature Conservancy which is in use throughout North America. Ranking is usually based primarily on the number of occurrences, since that is frequently the only information available. Information, such as population size and trend, life history and reproductive strategies, range and current threats is used when available.

Criteria II-1 Global Rank (10 points)
Highest score is given to G1 and G2 taxa and then in descending order G3, G4,G5.

G2	10
G3	5
G4,G?	3
G5	1

Criteria II-2 Degree of Threat (10 points)
Both threat to population and threat to habitat are considered. Taxa under extreme threat receive a higher score than those under moderate threat.

ThPop	ThHab	
A	A	10
A	B	5
B	A	5
B	B	2
Other		1

Criteria II-3 Last Observation Date (5 points)
Taxa for which occurrences have not been reported for many years are given a higher score than for those recently reported.

Prior to 1951	5
1976	4
1990	3
2000	2

Criteria II-4 Provincial Rank (5 points)
Highest score is given to S1 taxa, and then in descending order S2 and S3. It may be useful to consider number of element occurrences (eos)

S1 (1-2 eos)	5
S1 (3-5- eos)	4
S2 (6-10 eos)	3
S2 (11-20- eos)	2
S3 (>20 eos)	1

Additional consideration (but not scoring) was given to species that exhibit a geographic range restriction. Of particular importance are those Great Plains species that show an affinity for glaciated portions of the northern great plains. These are identified in the lists under the "Dist" heading as NWG-g (Northwestern Great Plains-glaciated) or NG-g (Northern Great Plains-glaciated).

2.2.3 Implementation Considerations

Prior to proceding with obtaining status reports on priority species there are other considerations which will affect the scheduling, manpower and resource needs for status reports, particularly with respect to field work aspects. These considerations include:

Field Work Effort
Species which require very little field work effort may proceed sooner than those which require a major field effort. For example it may make sense to proceed with status reports for species which occur in few known locations or whose known and expected occurrences are easily accessible or which have been recently studied and hence little additional field work is required even though there are higher ranking species where field information is unavailable or difficult to obtain.

Ease of Recognition of the Taxa

Some taxa may not be readily identifiable from gross field characteristics and field identification would require participation by botanists with expertise in these taxa. Availability of this expertise would need to be considered in designing the field work program for status reports.

Proximity to other Priority Taxa

There may be efficiencies in use of limited resources for field survey to prepare status reports for an aggregation of priority taxa occurring within the same Subregion. Species occurring in close proximity to other species on the priority list may be considered for status reports prior to those which are relatively isolated from other taxa on the priority list.

2.2.4 Key Steps in Preparing a Status Report for Vascular Plant Taxa

1) Acquire background information on target species using ANHIC database, bibliographic search, herbarium visits and interviews.
2) Conduct field work to relocate previously reported populations and survey potential habitat. Complete element occurrence reports (precise location, population size, phenology, current land use and management, threats or concerns).
3) Verify specimens (collection or photo) and label for depositing in herbarium.
4) Enter information from element occurrence reports in ANHIC database.
5) Prepare the final status report which synthesizes information on habitat, conservation biology, distribution, population size and trends, limiting factors, status designations, and recent management in Alberta.

3. PROTOCOLS FOR PRIORITY SPECIES 2001-2003

The species list was reviewed and further refined to remove species that were ranked S3 or higher. The final list comprises 112 species occurring in the Grassland Natural Region.

All species were ranked using the methodology defined in Section 2.2.1. Following ranking and the simplification of habitat information into 13 broad categories, the database was manipulated to determine the highest priority habitats, natural subregions and species within the Grassland Natural Region. These were further analyzed to determine logistical arrangements for conducting field surveys and preparation of status reports as defined in Section 2.2.3. A work plan was created which allocates efforts over five years (2001-2005).

There are two major types of priorities for field work:

- field surveys to assess status and threats
- monitoring known "status" species (ie COSEWIC) to determine trends and conservation priorities

Further assessment work was based first on perceived threat and secondarily on logistical arrangements (geographic proximity, habitat similarities for species' groups). Ease of recognition of taxa played the least important role but is flagged in the protocols for species where there are taxonomic difficulties.

3.1 Evaluation Results -- Priorities for Status Reports

3.1.1 Northern Fescue Grassland Natural Subregion

This is a high priority Natural Subregion. Most habitats are under significant threat.

Recommended Year of Action: 2001 for high priority habitats; 2004 for lowest ranked species.

Priorities (12 bold-faced species): Wetland-Meadow, Grassland-Sandy and Wetland-Sandy habitats. An additional group of lower-ranked species (see 2001 Work Plan below) could be surveyed in conjunction with the higher ranked species in these habitat types.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
Lobelia spicata	**spiked lobelia**	21	R	Wetland-Meadow	21				G
Potentilla plattensis	**low cinquefoil**	19	R	Grassland-Sandy	19				NG-g
Lysimachia hybrida		16	R	Wetland-Sandy	16			16	G
Viola pedatifida	**crowfoot violet**	16	R	Grassland-Sandy	16	16			G
Sagina decumbens	**spreading pearlwort**	13	R	Wetland-Sandy	13				NG-g
Bromus latiglumis (altissimus)	**Canada brome**	12	B	Woodland	12				NG
Sisyrinchium septentrionale	**pale blue-eyed grass**	10	B	Wetland-Meadow	10	10	10	10	NG-g
Atriplex powellii	**Powell's saltbush**	10	B	Wetland-Alkali	10			10	NWG-g
Rorippa sinuata	**spreading yellow cress**	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	**slender cress**	9	B	Wetland-Sandy	9		9	9	NG
Camissonia breviflora	**taraxia**	9	B	Wetland-Alkali	9			9	WG
Gratiola neglecta	**clammy hedge-hyssop**	9	B	Wetland	9	9	9		G
Rorippa curvipes var. truncata	blunt-leaved yellow cress	8	Y	Wetland-Sandy	8			8	NG
Aster pauciflorus	few-flowered aster	8	Y	Wetland-Alkali	8			8	NG-g
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8		8	8	G
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Lomatogonium rotatum	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7		7	7	G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7		7	7	WG
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7		7	7	WG
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6		6	6	G
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6		6	6	NG-g
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6		6	6	NWG
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5		5	5	G

2001 Work Plan-Northern Fescue Grassland

Priorities (15 species) lie in Wetland-Meadow, Grassland-Sandy and Wetland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
Potentilla plattensis	low cinquefoil	19	R	Grassland-Sandy	19				NG-g
Viola pedatifida	crowfoot violet	16	R	Grassland-Sandy	16	16			G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7		7	7	WG
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6		6	6	NWG
Lobelia spicata	spiked lobelia	21	R	Wetland-Meadow	21				G
Sisyrinchium septentrionale	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Lysimachia hybrida		16	R	Wetland-Sandy	16			16	G
Sagina decumbens	spreading pearlwort	13	R	Wetland-Sandy	13				NG-g
Rorippa sinuata	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	slender cress	9	B	Wetland-Sandy	9		9	9	NG
Rorippa curvipes var. truncata	blunt-leaved yellow cress	8	Y	Wetland-Sandy	8			8	NG
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7		7	7	G
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6		6	6	G

2004 Work Plan-Northern Fescue Grassland

16 lower-ranked species in Grassland, Slopes-Sandy, Wetland, Wetland-Alkali, Wetland Springs, Woodland, and Woodland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	NFG	FFG	MG	DMG	Dist
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Gratiola neglecta	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
Lomatogonium rotatum	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
Atriplex powellii	Powell's saltbush	10	B	Wetland-Alkali	10			10	NWG-g
Camissonia breviflora	taraxia	9	B	Wetland-Alkali	9			9	WG
Aster pauciflorus	few-flowered aster	8	Y	Wetland-Alkali	8			8	NG-g
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8		8	8	G
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7		7	7	WG
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6		6	6	NG-g
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5		5	5	G
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Bromus latiglumis (altissimus)	Canada brome	12	B	Woodland	12				NG
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G

3.1.2 Foothills Fescue Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores.

Recommended Years of Action: 2001-2002 for high priority species.

Priorities (17 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Grassland, Grassland-Unglaciated, Wetland-Springs, Wetland and Wetland-Sandy habitats. It is likely that an additional group of lower-ranked species (see 2001 work plan below) could be surveyed in conjunction with the higher ranked species in these habitat types.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	FFG	NFG	MG	DMG	Dist
Potentilla finitima*	**sandhills cinquefoil**	19	R	Grassland-Sandy	19				NG-g
Viola pedatifida*	**crowfoot violet**	16	R	Grassland-Sandy	16	16			G
Gentiana fremontii*		13	R	Wetland-Springs	13				NWG-g
Lupinus minimus	**least lupine**	11	B	Grassland	11				NWG-g
Erigeron radicatus	**dwarf fleabane**	11	B	Grassland-Sandy	11		11	11	NWG-g
Iris missouriensis	**western blue flag**	11	B	Wetland-Meadow	11				WG
Juncus nevadensis	**Nevada rush**	11	B	Wetland-Springs	11		11		NWG-g
Oxytropis lagopus var conjugans	**hare-footed locoweed**	10	B	Grassland-Ungl.	10				NWG-g
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Sisyrinchium septentrionale	**pale blue-eyed grass**	10	B	Wetland-Meadow	10	10	10	10	NG-g
Amaranthus californicus	**Californian amaranth**	10	B	Wetland-Sandy	10			10	NWG-g
Carex parryana var parryana	**Parry's sedge**	10	B	Wetland-Springs	10		10	10	NWG-g
Plantago canescens	**western ribgrass**	9	B	Grassland-Ungl.	9				NWG-g
Muhlenbergia racemosa	**marsh muhly**	9	B	Slopes-Sandy	9			9	G
Gratiola neglecta	**clammy hedge-hyssop**	9	B	Wetland	9	9	9		G
Allium geyeri	**Geyer's onion**	9	B	Wetland-Meadow	9				WG
Rorippa sinuata	**spreading yellow cress**	9	B	Wetland-Sandy	9	9	9	9	G
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja cusickii	yellow paintbrush	8	Y	Grassland	8				NWG-g
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Mertensia lanceolata	lance-leaved lungwort	8	Y	Grassland	8				WG
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Lomatogonium rotatum	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Festuca occidentalis	western fescue	8	Y	Woodland	8				NWG-g
Onosmodium molle	western false gromwell	8	Y	Woodland-Sandy	8		8		G
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Veronica catenata	water speedwell	7	Y	Wetland	7		7		G
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6			6	NWG

* - outside Alberta Environment's corporate Prairie Region

2001 Work Plan-Foothills Fescue Grassland

Priorities (17 species) lie in Wetland-Meadow, Wetland-Springs, Wetland and Wetland-Sandy habitats. One Grassland-Sandy species should be surveyed in conjunction with Northern Fescue Grassland 2001 surveys.

Gentiana fremontii*		13	R	Wetland-Springs	13				NWG-g
Juncus nevadensis	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
Carex parryana var parryana	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G
Iris missouriensis*	western blue flag	11	B	Wetland-Meadow	11				WG
Sisyrinchium septentrionale	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
Allium geyeri	Geyer's onion	9	B	Wetland-Meadow	9				WG
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Amaranthus californicus	Californian amaranth	10	B	Wetland-Sandy	10			10	NWG-g
Rorippa sinuata	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Gratiola neglecta	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
Lomatogonium rotatum	marsh felwort	8	Y	Wetland	8	8		8	NWG-g
Veronica catenata	water speedwell	7	Y	Wetland	7		7		G

* - recent monitoring work done and status report prepared

Viola pedatifida*	crowfoot violet	16	R	Grassland-Sandy	16	16			G

* - conduct surveys in conjunction with Northern Fescue Grassland

2002 Work Plan-Foothills Fescue Grassland

Priorities (14 species) lie in Grassland-Sandy, Grassland-Unglaciated, Grassland and Slopes-Sandy habitats.

Potentilla finitima	sandhills cinquefoil	19	R	Grassland-Sandy	19				NG-g
Erigeron radicatus	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Oxytropis lagopus var conjugans*	hare-footed locoweed	10	B	Grassland-Ungl.	10				NWG-g
Plantago canescens	western ribgrass	9	B	Grassland-Ungl.	9				NWG-g
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja cusickii	yellow paintbrush	8	Y	Grassland	8				NWG-g
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Muhlenbergia racemosa	marsh muhly	9	B	Slopes-Sandy	9			9	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG

*- status report already prepared

2005 Work Plan-Foothills Fescue Grassland

7 lower ranked species lie in Sand Dunes, Slopes-Badlands, Wetland-Alkali, Woodland and Woodland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	FFG	NFG	MG	DMG	Dist
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Festuca occidentalis	western fescue	8	Y	Woodland	8				NWG-g
Onosmodium molle	western false gromwell	8	Y	Woodland-Sandy	8		8		G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7		7	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6			6	NWG

Lupinus minimus and *Mertensia lanceolata* are perhaps best surveyed in conjunction with southwestern mountain rare plant surveys:

Lupinus minimus	least lupine	11	B	Grassland	11				NWG-g
Mertensia lanceolata	lance-leaved lungwort	8	Y	Grassland	8				WG

3.1.3 Mixed Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores.

Recommended Years of Action: 2002-2004 for high priority species; 2005 for lower-ranked species

Priorities (20 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Sand Dunes, Wetland-Alkali, Grassland, Shrubland, Slopes-Badlands, Wetland-Springs, Wetland and Wetland-Sandy habitats. Additional lower-ranked species can be surveyed in conjunction with the higher ranked .

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Thelesperma marginatum	**greenthread**	19	R	Grassland-Sandy	19			19	NWG-g
Chenopodium subglabrum	**smooth narrow-leaved goosefoot**	13	R	Sand Dunes	13			13	NG-g
Halimolobos virgata	**halimolobos**	12	B	Grassland-Sandy	12			12	NWG-g
Arabidopsis salsuginea	**mouse-ear cress**	12	B	Wetland-Alkali	12			12	NWG-g
Erigeron radicatus	**dwarf fleabane**	11	B	Grassland-Sandy	11		11	11	NWG-g
Juncus nevadensis	**Nevada rush**	11	B	Wetland-Springs	11		11		NWG-g
Eleocharis ovata	**Engelmann's spike-rush**	10	B	Wetland	10				G
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Suckleya suckleyana	**poison suckleya**	10	B	Wetland-Alkali	10			10	WG
Sisyrinchium septentrionale	**pale blue-eyed grass**	10	B	Wetland-Meadow	10	10	10	10	NG-g
Polygonum polygaloides ssp confertiflorum	**Watson's knotweed**	10	B	Wetland-Sandy	10			10	NWG-g
Carex parryana var parryana	**Parry's sedge**	10	B	Wetland-Springs	10		10	10	NWG-g
Chenopodium incanum	**goosefoot**	9	B	Grassland-Sandy	9			9	G
Cryptantha minima	**small cryptanthe**	9	B	Sand Dunes	9			9	WG
Cuscuta gronovii	**common dodder**	9	B	Shrubland	9			9	G
Picradeniopsis (Bahia) oppositifolia	**picradeniopsis**	9	B	Slopes-Badlands	9			9	WG
Elatine triandra	**waterwort**	9	B	Wetland	9			9	G
Gratiola neglecta	**clammy hedge-hyssop**	9	B	Wetland	9	9	9		G
Rorippa sinuata	**spreading yellow cress**	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	**slender cress**	9	B	Wetland-Sandy	9	9		9	NG
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Chenopodium desiccatum	goosefoot	8	Y	Sand Dunes	8			8	G
Astragalus kentrophyta var kentrophyta	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Spartina pectinata	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
Psilocarphus elatior	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
Onosmodium molle	western false gromwell	8	Y	Woodland-Sandy	8		8		G
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Coreopsis tinctoria	common tickseed	7	Y	Wetland	7			7	G
Potamogeton foliosus	leafy pondweed	7	Y	Wetland	7				G
Veronica catenata	water speedwell	7	Y	Wetland	7		7		G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7	7		7	wg
Downingia laeta	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5	5		5	G
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

2002 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (15 species) lie in Wetland-Meadow, Wetland-Springs and Wetland habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

Eleocharis ovata	Engelmann's spike-rush	10	B	Wetland	10				G
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Elatine triandra	waterwort	9	B	Wetland	9			9	G
Gratiola neglecta	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
Coreopsis tinctoria	common tickseed	7	Y	Wetland	7			7	G
Potamogeton foliosus	leafy pondweed	7	Y	Wetland	7				G
Veronica catenata	water speedwell	7	Y	Wetland	7		7		G
Sisyrinchium septentrionale	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Juncus nevadensis	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
Carex parryana var parryana	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G

2003 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (15 species) lie in Wetland-Alkali, Wetland-Springs and Wetland-Sandy habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Polygonum polygaloides ssp confertiflorum	Watson's knotweed	10	B	Wetland-Sandy	10			10	NWG-g
Rorippa sinuata	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	slender cress	9	B	Wetland-Sandy	9	9		9	NG
Psilocarphus elatior	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
Downingia laeta	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G
Arabidopsis salsuginea	mouse-ear cress	12	B	Wetland-Alkali	12			12	NWG-g
Suckleya suckleyana	poison suckleya	10	B	Wetland-Alkali	10			10	WG
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Spartina pectinata	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7	7		7	wg
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5	5		5	G

2004 Work Plan-Mixed Grassland-see Dry Mixed Grass for Recommended Combination Study

Priorities (18 species) lie in Grassland, Grassland-Sandy, Sand Dune, Shrubland and Slopes-Badlands habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Thelesperma marginatum	greenthread	19	R	Grassland-Sandy	19			19	NWG-g
Halimolobos virgata	halimolobos	12	B	Grassland-Sandy	12			12	NWG-g
Erigeron radicatus	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
Chenopodium incanum	goosefoot	9	B	Grassland-Sandy	9			9	G
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Chenopodium subglabrum*	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
Cryptantha minima	small cryptanthe	9	B	Sand Dunes	9			9	WG
Chenopodium desiccatum	goosefoot	8	Y	Sand Dunes	8			8	G
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Cuscuta gronovii	common dodder	9	B	Shrubland	9			9	G
Picradeniopsis (Bahia) oppositifolia	picradeniopsis	9	B	Slopes-Badlands	9			9	WG
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g

* - status report prepared

2004 Work Plan-Mixed Grassland

9 lower-ranked species lie in Slopes-Sandy and Woodland-Sandy habitats.

Astragalus kentrophyta var kentrophyta	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
Onosmodium molle	western false gromwell	8	Y	Woodland-Sandy	8		8		G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

3.1.4 Dry Mixed Grassland Natural Subregion

This is a high priority Natural Subregion with many species with moderate to high scores. Due to a slightly slower rate of change overall, the subregion has been assigned a lower ranked compared with other Subregions that have already lost considerably more habitat percentage-wise than the Dry Mixedgrass or that are facing more extreme current habitat pressures.

Recommended Years of Action: 2003-2005 for high priority species; 2006 for lower-ranked species

Priorities (35 bold-faced species) lie in Wetland-Meadow, Grassland-Sandy, Sand Dunes, Wetland-Alkali, Grassland, Shrubland, Slopes-Badlands, Woodland, Wetland-Springs, Wetland and Wetland-Sandy habitats. Additional lower-ranked species can be surveyed in conjunction with the higher ranked species in these habitat types. The highest priorities for monitoring work lie in this region since most of the status reports already prepared are for species in the Natural Subregion.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Cyperus squarrosus	**awned nut-grass**	20	R	Wetland-Sandy	20				G
Thelesperma marginatum	**greenthread**	19	R	Grassland-Sandy	19			19	NWG-g
Lysimachia hybrida		16	R	Wetland-Sandy	16	16			G
Bacopa rotundifolia	**water hyssop**	14	R	Wetland	14				G
Chenopodium subglabrum	**smooth narrow-leaved goosefoot**	13	R	Sand Dunes	13			13	NG-g
Halimolobos virgata	**halimolobos**	12	B	Grassland-Sandy	12			12	NWG-g
Hordeum pusillum	**little barley**	12	B	Slopes-Sandy	12				G
Arabidopsis salsuginea	**mouse-ear cress**	12	B	Wetland-Alkali	12			12	NWG-g
Camissonia andina	**upland evening-primrose**	11	B	Grassland-Sandy	11				NWG-g
Erigeron radicatus	**dwarf fleabane**	11	B	Grassland-Sandy	11		11	11	NWG-g
Nuttallanthus canadensis	**field toad-flax**	11	B	Grassland-Sandy	11				G
Castilleja sessiliflora	**downy paintbrush**	11	B	Sand Dunes	11				G
Atriplex truncata	**saltbush**	11	B	Wetland-Alkali	11				NWG-g
Quercus macrocarpa	**burr oak**	11	B	Woodland	11				G
Fraxinus pensylvanica	**green ash**	11	B	Woodland?	11				G
Tradescantia occidentalis	**western spiderwort**	10	B	Sand Dunes	10				G
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Atriplex powellii	**Powell's saltbush**	10	B	Wetland-Alkali	10	10			NWG-g
Suckleya suckleyana	**poison suckleya**	10	B	Wetland-Alkali	10			10	WG
Sisyrinchium septentrionale	**pale blue-eyed grass**	10	B	Wetland-Meadow	10	10	10	10	NG-g
Amaranthus californicus	**Californian amaranth**	10	B	Wetland-Sandy	10		10		NWG-g
Polygonum polygaloides ssp confertiflorum	**Watson's knotweed**	10	B	Wetland-Sandy	10			10	NWG-g
Carex parryana var parryana	**Parry's sedge**	10	B	Wetland-Springs	10		10	10	NWG-g
Chenopodium incanum	**goosefoot**	9	B	Grassland-Sandy	9			9	G
Cryptantha minima	**small cryptanthe**	9	B	Sand Dunes	9			9	WG
Cuscuta gronovii	**common dodder**	9	B	Shrubland	9			9	G
Chenopodium watsonii	**Watson's goosefoot**	9	B	Slopes-Badlands	9				WG
Picradeniopsis (Bahia) oppositifolia	**picradeniopsis**	9	B	Slopes-Badlands	9			9	WG
Muhlenbergia racemosa	**marsh muhly**	9	B	Slopes-Sandy	9		9		G
Yucca glauca	**soapweed**	9	B	Slopes-Sandy	9				G
Elatine triandra	**waterwort**	9	B	Wetland	9			9	G
Camissonia breviflora	**taraxia**	9	B	Wetland-Alkali	9	9			WG
Rorippa sinuata	**spreading yellow cress**	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	**slender cress**	9	B	Wetland-Sandy	9	9		9	NG
Carex hystericina	**porcupine sedge**	9	B	Wetland-Springs	9				G
Munroa squarrosa	false buffalo grass	8	Y	Grassland-Sandy	8				WG
Cyperus schweinitzii	sand nut-grass	8	Y	Sand Dunes	8				G
Franseria acanthicarpa	bur ragweed	8	Y	Sand Dunes	8				WG
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Chenopodium desiccatum	goosefoot	8	Y	Sand Dunes	8			8	G
Shinnersoseris (Lygodesmia) rostrata	annual skeletonweed	8	Y	Sand Dunes	8				G
Tripterocalyx micranthus	sand verbena	8	Y	Sand Dunes	8				WG
Asclepias viridiflora	green milkweed	8	Y	Slopes-Sandy	8				G
Astragalus kentrophyta var kentrophyta	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
Lomatogonium rotatum	marsh felwort	8	Y	Wetland	8	8	8		NWG-g
Aster pauciflorus	few-flowered aster	8	Y	Wetland-Alkali	8	8			NG-g
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
Spartina pectinata	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
Boisduvalia glabella	smooth boisduvalia	8	Y	Wetland-Sandy	8				NWG-g
Centunculus minimus	chaffweed	8	Y	Wetland-Sandy	8				G
Psilocarphus elatior	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
Rorippa curvipes var. truncata	blunt-leaved yellow cress	8	Y	Wetland-Sandy	8	8			NG

Dry Mixed Grassland Natural Subregion (continued)

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Astragalus purshii	Pursh's milk vetch	7	Y	Grassland-Sandy	7				NWG
Linanthus septentrionalis	linanthus	7	Y	Grassland-Sandy	7				NWG-g
Nothocalais cuspidata	prairie false dandelion	7	Y	Grassland-Sandy	7				G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Suaeda moquinii	Moquin's sea-blite	7	Y	Slopes-Badlands	7				NWG-g
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Coreopsis tinctoria	common tickseed	7	Y	Wetland	7			7	G
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7	7		7	WG
Lilaea scilloides	flowering-quillwort	7	Y	Wetland-Alkali	7				NWG-g
Cerastium brachypodum		7	Y	Wetland-Sandy	7				G
Downingia laeta	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
Bidens frondosa	common beggarticks	7	Y	Wetland-Springs	7				G
Carex retrorsa	turned sedge	7	Y	Wetland-Springs	7				NG-g
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7	7		G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Eriogonum cernuum	nodding umbrella-plant	6	G	Sand Dunes/ Slopes-Sandy	6				WG
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6		6		NWG
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5	5		5	G
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

2001 Work Plan-Dry Mixed Grassland

Priorities (3 species) for monitoring lie in Sand Dune habitats. This work should be done in conjunction with Mixed Grassland studies in 2001.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Chenopodium subglabrum*	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
Tradescantia occidentalis*	western spiderwort	10	B	Sand Dunes	10				G
Tripterocalyx micranthus*	sand verbena	8	Y	Sand Dunes	8				WG

* - status report prepared

2002 Work Plan-Wetlands (1) in Mixed Grassland and Dry Mixed Grassland

Priorities (19 species) lie in Wetland-Meadow, Wetland-Springs and Wetland habitats. Due to considerable overlap, these should be surveyed in conjunction with other Natural Subregions.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Bacopa rotundifolia	water hyssop	14	R	Wetland				14	G
Eleocharis ovata	Engelmann's spike-rush	10	B	Wetland	10				G
Elodea bifoliata		10	B	Wetland	10		10	10	NWG-g
Elatine triandra	waterwort	9	B	Wetland	9			9	G
Gratiola neglecta	clammy hedge-hyssop	9	B	Wetland	9	9	9		G
Lomatogonium rotatum	marsh felwort	8	Y	Wetland		8	8	8	NWG-g
Coreopsis tinctoria	common tickseed	7	Y	Wetland	7			7	G
Potamogeton foliosus	leafy pondweed	7	Y	Wetland	7				G
Veronica catenata	water speedwell	7	Y	Wetland	7		7		G
Sisyrinchium septentrionale	pale blue-eyed grass	10	B	Wetland-Meadow	10	10	10	10	NG-g
Juncus confusus	few-flowered rush	6	G	Wetland-Meadow	6	6	6	6	NWG-g
Juncus nevadensis	Nevada rush	11	B	Wetland-Springs	11		11		NWG-g
Carex parryana var parryana	Parry's sedge	10	B	Wetland-Springs	10		10	10	NWG-g
Carex hystericina	porcupine sedge	9	B	Wetland-Springs				9	G
Sphenopholis obtusata	prairie wedge grass	7	Y	Wetland-Springs	7	7	7	7	G
Bidens frondosa	common beggarticks	7	Y	Wetland-Springs				7	G
Carex retrorsa	turned sedge	7	Y	Wetland-Springs				7	NG-g
Carex nebrascensis	Nebraska sedge	6	G	Wetland-Springs	6		6	6	WG
Lycopus americanus	American water-horehound	6	G	Wetland-Springs	6		6	6	G

2003 Work Plan-Wetlands (2) in Mixed Grassland and Dry Mixed Grassland

Priorities (28 species) lie in Wetland-Alkali, Wetland-Springs and Wetland-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Arabidopsis salsuginea	mouse-ear cress	12	B	Wetland-Alkali	12			12	NWG-g
Atriplex truncata	saltbush	11	B	Wetland-Alkali				11	NWG-g
Atriplex powellii	Powell's saltbush	10	B	Wetland-Alkali		10		10	NWG-g
Suckleya suckleyana	poison suckleya	10	B	Wetland-Alkali	10			10	WG
Camissonia breviflora	taraxia	9	B	Wetland-Alkali		9		9	WG
Heliotropium curassavicum	spatulate-leaved heliotrope	8	Y	Wetland-Alkali	8	8		8	G
Ruppia maritima	widgeon-grass	8	Y	Wetland-Alkali	8	8	8		G
Spartina pectinata	prairie cord grass	8	Y	Wetland-Alkali	8			8	G
Aster pauciflorus	few-flowered aster	8	Y	Wetland-Alkali		8		8	NG-g
Atriplex canescens ssp aptera		7	Y	Wetland-Alkali	7	7		7	wg
Lilaea scilloides	flowering-quillwort	7	Y	Wetland-Alkali				7	NWG-g
Spergularia salina	salt-marsh sand spurry	6	G	Wetland-Alkali	6	6		6	NG-g
Muhlenbergia asperifolia	scratch grass	5	G	Wetland-Alkali	5	5		5	G
Cyperus squarrosus	awned nut-grass	20	R	Wetland-Sandy				20	G
Lysimachia hybrida		16	R	Wetland-Sandy		16		16	G
Amaranthus californicus	Californian amaranth	10	B	Wetland-Sandy			10	10	NWG-g
Polygonum polygaloides ssp confertiflorum	Watson's knotweed	10	B	Wetland-Sandy	10			10	NWG-g
Rorippa sinuata	spreading yellow cress	9	B	Wetland-Sandy	9	9	9	9	G
Rorippa tenerrima	slender cress	9	B	Wetland-Sandy	9	9		9	NG
Psilocarphus elatior	woollyheads	8	Y	Wetland-Sandy	8			8	NWG-g
Boisduvalia glabella	smooth boisduvalia	8	Y	Wetland-Sandy				8	NWG-g
Centunculus minimus	chaffweed	8	Y	Wetland-Sandy				8	G
Rorippa curvipes var. truncata	blunt-leaved yellow cress	8	Y	Wetland-Sandy		8		8	NG
Downingia laeta	downingia	7	Y	Wetland-Sandy	7			7	NWG-g
Marsilea vestita	hairy pepperwort	7	Y	Wetland-Sandy	7	7		7	G
Cerastium brachypodum		7	Y	Wetland-Sandy				7	G
Oenothera flava	low yellow evening-primrose	6	G	Wetland-Sandy	6		6	6	NG-g
Potentilla paradoxa	bushy cinquefoil	6	G	Wetland-Sandy	6	6		6	G

2004 Work Plan-Mixed and Dry Mixed Grassland

Priorities (31 species) lie in Grassland, Grassland-Sandy, Sand Dune, Shrubland, Slopes-Badlands and Slopes-Sandy habitats.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	MG	NFG	FFG	DMG	Dist
Aster campestris	meadow aster	8	Y	Grassland	8		8		WG
Castilleja lutescens	stiff yellow paintbrush	8	Y	Grassland	8	8	8		NWG-g
Ranunculus glaberrimus	early buttercup	7	Y	Grassland	7	7	7	7	NWG
Thelesperma marginatum	greenthread	19	R	Grassland-Sandy	19			19	NWG-g
Halimolobos virgata	halimolobos	12	B	Grassland-Sandy	12			12	NWG-g
Erigeron radicatus	dwarf fleabane	11	B	Grassland-Sandy	11		11	11	NWG-g
Chenopodium incanum	goosefoot	9	B	Grassland-Sandy	9			9	G
Astragalus lotiflorus	low milk vetch	7	Y	Grassland-Sandy	7			7	G
Townsendia exscapa	low townsendia	7	Y	Grassland-Sandy	7	7		7	WG
Calylophus serrulatus	shrubby evening-primrose	6	G	Grassland-Sandy	6	6	6	6	G
Crepis occidentalis	small-flowered hawk's-beard	6	G	Grassland-Sandy	6	6		6	NWG
Eriogonum cernuum	nodding umbrella-plant	6	G	Sand Dunes/ Slopes-Sandy				6	WG
Chenopodium subglabrum*	smooth narrow-leaved goosefoot	13	R	Sand Dunes	13			13	NG-g
Cryptantha minima	small cryptanthe	9	B	Sand Dunes	9			9	WG
Chenopodium desiccatum	goosefoot	8	Y	Sand Dunes	8			8	G
Polanisia dodecandra	clammyweed	8	Y	Sand Dunes; Slopes-Sandy	8		8	8	G
Cuscuta gronovii	common dodder	9	B	Shrubland	9			9	G
Picradeniopsis (Bahia) oppositifolia	picradeniopsis	9	B	Slopes-Badlands	9			9	WG
Chenopodium watsonii	**Watson's goosefoot**	9	B	Slopes-Badlands				9	WG
Suaeda moquinii	Moquin's sea-blite	7	Y	Slopes-Badlands				7	NWG-g
Stephanomeria runcinata	rush-pink	6	G	Slopes-Badlands	6		6	6	NWG-g
Hordeum pusillum	**little barley**	12	B	Slopes-Sandy				12	G
Muhlenbergia racemosa	**marsh muhly**	9	B	Slopes-Sandy			9	9	G
Yucca glauca	**soapweed**	9	B	Slopes-Sandy				9	G
Asclepias viridiflora	green milkweed	8	Y	Slopes-Sandy				8	G
Astragalus kentrophyta var kentrophyta	prickly milk vetch	8	Y	Slopes-Sandy	8			8	NWG
Aristida purpurea var longiseta	red three-awn	7	Y	Slopes-Sandy	7			7	G
Draba reptans	whitlow-grass	7	Y	Slopes-Sandy	7		7	7	G
Ellisia nyctelea	waterpod	7	Y	Slopes-Sandy	7	7	7	7	G
Orobanche ludoviciana	Louisiana broom-rape	7	Y	Slopes-Sandy	7		7	7	NWG
Hymenopappus filifolius	tufted hymenopappus	6	G	Slopes-Sandy	6		6	6	WG

* - status report prepared?

2005 Work Plan-Dry Mixed Grassland

6 lower-ranked species lie in Woodland types. Two higher ranked species have been included here due to their doubtful native status.

SNAME	SCOMNAME	TOTAL VALUE	PRIORITY	SHORT HABITAT	DMG	NFG	FFG	MG	Dist
Quercus macrocarpa	burr oak	11	B	Woodland	11				G
Fraxinus pensylvanica	green ash	11	B	Woodland?	11				G
Elymus virginicus	Virginia wild rye	7	Y	Woodland-Sandy	7	7	7		G
Osmorhiza longistylis	smooth sweet cicely	7	Y	Woodland-Sandy	7			7	G
Oryzopsis micrantha	little-seed rice grass	6	G	Woodland-Sandy	6		6		NWG
Parietaria pensylvanica	American pellitory	5	G	Woodland-Sandy	5			5	G

4. SUMMARY OF RECOMMENDATIONS FOR PROTOCOLS IN YEAR 2001-2005

	2001	2002	2003	2004	2005
Northern Fescue Grassland	15 species			16 lower ranked species	
Foothills Fescue Grassland	17 species	16 species			7 lower ranked species
Mixedgrass		19 combined species	29 combined species	29 combined species	9 lower ranked species
Dry Mixedgrass	3 species for monitoring				6 lower ranked species

5. COST ESTIMATES

Cost estimates are based on $2000/ species to conduct background research, undertake field work and prepare a report. Economies have been made by programming several species that are phenologically and/or habitat related, e.g. fescue grassland, mixed grassland wetland.

Cost per priority Natural Subregion or combination, 15-29 species -- = $30,000-60,000

6. LITERATURE CITED

Barkley, T.M. 1986. Introduction. Pp. 1-6, *In:* Great Plains Flora Association (ed.), Flora of the Great Plains. University Press of Kansas, Lawrence.

7. PROTOCOLS AND ELEMENT OCCURRENCES

The following is a summary of recommended survey protocols (natural region, habitat, phenology, specific search strategies where these are known) and element occurrence (EOs) in the Alberta Natural Heritage Information Centre database. EOs outside the study area are included to give a better picture of the range of habitats and phenology.

Allium geyeri Geyer's onion

Natural Region: Foothills Fescue Grassland
Habitat: Wetland-Meadow; may also occur in rocky grassland
Phenology: flowers early June to late July
Specific Search Strategies (if any): check Camassia quamash sites and moist disturbed sites in extreme southwestern Alberta; populations may be large where found; highly visible and distinctive species, even in fruit. Should be searched for in Foothills Parkland region especially or in Foothills Fescue where there is some lusher vegetation, e.g. deciduous woodlands

Element Occurrences:

Element Code: PMLIL02100 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-07-27
Last Observed: 1989-07-27 ***First Observed:*** 1989-07-27 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Hwy 6 and Dungarvan Creek crossing, 0.3 km S of.
General Description: ditch along hwy
Min Elev. (m): 1380 ***Max Elev. (m):*** 1380 ***Best Source of Info:*** U89ESR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 291859 5455100 Dungarvan Creek LSD16-17-3-29 W4M; Site #1 116 5061
Source Code Author Publisher Year Title
U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for Natural and Protected Areas, Public Lands Division
Date Source Abstract Code Observer Occurrence Data
1989-07-27 U89ESR01ABCA K.E. & C.A. Tannas more than 300 plants fruiting and flowering
Allium geyeri Geyer's onion SRank: S2
+++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 002 ***Survey Date:*** 1989-07-26
Last Observed: 1989-07-26 ***First Observed:*** 1989-07-26 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Hwy 6 and Dungarvan Creek crossing, 1.5 km N of.
General Description: roadside ditch; habitat not semi aquatic but low and wet; also a dense Populus tremuloides and Salix bebiana stand to the west
Min Elev. (m): 1385 ***Max Elev. (m):*** 1385
Slope: 5.00 ***Best Source of Info:*** U89ESR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 291950 5456950 Dungarvan Creek LSD16-20-3-29 W4M; Site #2 117 5062
Source Code Author Publisher Year Title
U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for Natural and Protected Areas, Public Lands Division
Date Source Abstract Code Observer Occurrence Data
1989-07-26 U98ESR01ABCA K.E. & C.A. Tannas about 150 plants flowering and fruiting
Allium geyeri Geyer's onion SRank: S2
+++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 003 ***Survey Date:*** 1966-06-14
Last Observed: 1966-06-14 ***First Observed:*** 1966-06-14 ***Precision Code:*** S
Directions: Cardston, SW of; Along road to Beazer, 1 MI. S. OF JCT. WITH HWY 5
General Description: WET MEADOW ***Best Source of Info:*** S66DEVUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66DEVUCABCA02 de Vries, B.D. UC 06175 1966-06-14 Occuring locally
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 315350 5444625 Beazer 137 1081
Allium geyeri Geyer's onion SRank: S2
+++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 004 ***Survey Date:*** 1942-07-12
Last Observed: 1942-07-12 ***First Observed:*** 1942-07-12 ***Precision Code:*** G
Directions: TWIN BUTTE;
General Description: MEADOW
Min Elev. (m): 1350 ***Max Elev. (m):*** 1350
Other Comments: DET. AS A. RUBRUM; REV. TO A. GEYERI WATS. VAR. TENERUM M.E. JONES ***Best Source of Info:*** S42SEXUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S42SEXUAABCA01 Sexsmith, J.J. UA 4822 1942-07-12 Y [bulbils]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 292300 5460400 Twin Butte 49 16/113 51 1 1329
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 007 ***Survey Date:*** 1935-06-18
Last Observed: 1935-06-18 ***First Observed:*** 1935-06-18 ***Precision Code:*** S
Directions: Waterton Lakes N.P.; Red Rock Canyon.
General Description: open, dry slope
Min Elev. (m): 1750 ***Max Elev. (m):*** 1750 ***Best Source of Info:*** S35MOSUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35MOSUAABCA02 Moss, E.H. UA 4818 1935-06-18 Y [flowers, bulbils]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 717700 5446600 Red Rock Canyon 49 08/114 01 29 504
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 008 ***Survey Date:*** 1966-06-20
Last Observed: 1966-06-20 ***First Observed:*** 1966-06-20 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Cardston, 1 km directly S of.
General Description: locally common on wet meadow
Min Elev. (m): 1149 ***Max Elev. (m):*** 1149 ***Best Source of Info:*** S66DEVPMABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66DEVPMABCA07 de Vries, Bernard PM B68.4.215 1966-06-20 Y purple flowers, bulbils present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 331800 5450050 Cardson 49 11/113 18 6 946
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-07-04
Last Observed: 1996-07-04 ***First Observed:*** 1953-07-16 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Red rock , 1mile N of; Red Rock Canyon, up SE ridge from; Mt Glendowan, toward; trail, along gully above.
General Description: DAMP GRASSY SW SLOPE; Lower slope, in early season seepy areas, drying by mid-July; with Festuca scabrella & F.
idahoensis, Sygadenus elegans, Allium cernuum, A. Schoenoprasum.
Min Elev. (m): 1510 ***Max Elev. (m):*** 1580
Slope: 35.00 ***Aspect:*** SW ***Size of Occurrence:*** 3.00
Other Comments: White,with red strip(S69BLAULABCA01). ***Best Source of Info:*** PNDACH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53BREUAABCA04 Breitung, A.J. UA 4821 1953-07-16 Y [flowers, bulbils]
S69BLANMONCA01 Blais, W. NM 339493 1969-06-23 GWD
S69BLAULABCA01 Blais, W. & J. Nagy UL none 1969-06-23 [90%]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716550 5446725 Mt. Glendowan PA 6005.4 & 6005.5 337 649
Date Source Abstract Code Observer Occurrence Data
thousands of plants, flowering & fruiting (PNDACH01ABCA - 1996)
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 010 ***Survey Date:*** 1966-06-20
Last Observed: 1966-06-20 ***First Observed:*** 1966-06-20 ***Precision Code:*** G
Directions: RED ROCK CANYON ROAD ABOVE SECOND CAMPSITE
General Description: MOIST BANK ALONG CREEK
Min Elev. (m): 1430 ***Max Elev. (m):*** 1430 ***Best Source of Info:*** S66PACUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66PACUAABCA01 Packer, J.G. UA 32105 1966-06-20 Y [flowers, bulbils]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 281650 5443950 Blakiston "Above" means "past" in this context 59 1026
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 011 ***Survey Date:*** 1996-07-04
Last Observed: 1996-07-04 ***First Observed:*** 1935-06-18 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Red Rock Canyon, near, seeping rock ledge; bridge on west side of creek, ca 50 m up from.
General Description: Open, moist shaded poplar grove, slope;shallow soil over rock ledges with early season seepage, assoc. species Minuartia
rubella, Dodecatheon conjugens,Androsace (see Comments...)
Min Elev. (m): 1500 ***Max Elev. (m):*** 1525
Slope: 10.00 ***Aspect:*** E ***Size of Occurrence:*** 1.00
Other Comments: DET. AS A. GEYERI WATS. VAR. TENERUM M.E. JONES; (continued from Gen. Descrip.)...setentrivalis, Ranunculus, glaberrimus, Claytonia lanceolata & Mertensia longiflora. ***Best Source of Info:*** PNDACH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35MOSUAABCA03 Moss, E.H. UA 4817 1935-06-18 Y [flowers, bulbils]
S52MOSNMONCA01 Moss, E.H. NM 219395 1952-06-04 GWD
S52MOSUAABCA01 Moss, E.H. UA 4820 1952-06-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716900 5445950 Red Rock Canyon 130 562
Date Source Abstract Code Observer Occurrence Data
ca 100 plants, flower & fruit(PNDACH01ABCA - 1996)
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 013 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moist meadow, Senecio integerrimus, Alopecurus occidentalis, Castilleja cusickii, Camassia quamash.
Management Comments: Horses used in logging operations may have been the culprits and the feed brought in for the animals. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 306200 5432000 Poll Haven Community
Pasture
LSD 13 89 1047
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community
Pasture Grazing Lease 33957
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 014 ***Survey Date:*** 1953-07-28
Last Observed: 1953-07-28 ***First Observed:*** 1953-07-28 ***Precision Code:*** M
Directions: WATERTON LKS NAT'L PARK; Waterton River Crossing, near
General Description: MOIST PRAIRIE MEADOW
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280 ***Best Source of Info:*** S53BREACONCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53BREACONCA09 Breitung, A.J. AC none 1953-07-28 GWD
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 293100 5443600 Waterton River Crossing UTM grid TK94 138 1082
Allium geyeri Geyer's onion SRank: S2
++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 016 ***Survey Date:*** 1997-07-00

Last Observed: 1997-07-00 ***First Observed:*** 1997-06-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: Fish Lake, 1.5 km NW of; Pincher Creek, 300 m from.

General Description: more than 100 plants south of existing right-of-way

Min Elev. (m): 1448 ***Max Elev. (m):*** 1448

Other Comments: LSD 14 is incorrect, should be 16. ***Best Source of Info:*** U97AXY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82G08 11 715950 5470100 Fish Lake LSD 14 NE35-4-1 W5M - NE 35 4-1-5 LSD 16 16 3799

Source Code Author Publisher Year Title

U97AXY01ABCA Bush, Dana Axys Environmental Consulting Ltd. 1997 Cp 380 Canadian 88 Waterton Pipeline from the Waterton Gas Plant to Junction J

Allium geyeri Geyer's onion SRank: S2

++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 017 ***Survey Date:*** 1997-06-27

Last Observed: 1997-06-27 ***First Observed:*** 1997-06-27 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Fish Lake, ~3km S of; Drywood Creek, 1km N of.

General Description: >200 in 100m stretch along transmission line, 12 n creek W of RoW. SW 24 4-1-5 LSD 6 11U E 0717270, UTM 5465928 - 11U, 0717262 to UTM5465789 toSW 24 4-1-5 LSD 6 11U 0717270 UTM 5465928

Min Elev. (m): 1519 ***Max Elev. (m):*** 1633 ***Best Source of Info:*** U97AXY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82G08 11 717270 5465928 Fish Lake SW 24 4-1-5 LSD 6 11U E 0717270, UTM 5465928 - 11U 0717262 to UTM5465789 toSW 24 4-1-5 LSD 6 11U 0717270 UTM 5465928 - NW 24 4-1-5 LSD 11 17 3892

Source Code Author Publisher Year Title

U97AXY01ABCA Bush, Dana Axys Environmental Consulting Ltd. 1997 Cp 380 Canadian 88 Waterton Pipeline from the Waterton Gas Plant to Junction J

Allium geyeri Geyer's onion SRank: S2

++++++++++++++++++++++

Element Code: PMLIL02100 ***Occurrence Code #:*** 018 ***Survey Date:*** 1989-07-26

Last Observed: 1989-07-26 ***First Observed:*** 1989-07-26 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: Hwy 6 and Dungarvan Creek crossing, 2.3 km N of.

General Description: roadside ditch; wet area; poplar and willow to the West, giving site some afternoon shading

Min Elev. (m): 1380 ***Max Elev. (m):*** 1380

Slope: 10.00 ***Best Source of Info:*** U89ESR01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H04 12 292000 5457900 Dungarvan Creek LSD9-29-3-29 W4M; Site #3 118 5063

Source Code Author Publisher Year Title

U89ESR01ABCA Eastern Slopes Rangeland Consultants 1989 A Population Study of Geyer's wild onion Along Highway #6 for Natural and Protected Areas, Public Lands Division

Date Source Abstract Code Observer Occurrence Data

1989-07-26 U89ESR01ABCA K.E. & C.A. Tannas 30 on E side of road; 150 on W side of road, S of wet area, and 12 on W side of road, N of wet area; flowering and fruiting

Allium geyeri Geyer's onion SRank: S2

Amaranthus californicus **Californian amaranth**

Natural Region: Foothills Fescue Grassland, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers late July to August
Specific Search Strategies (if any): shallow depressions along seasonal streams and ephemeral wetlands, sometimes appearing weedy; quite visible into September; mostly very low growing but abundant where found. May be useful to check some cultivated areas for identification problems.

Element Occurrences:

Element Code: PDAMA040A0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1951-00-00
Last Observed: 1951-00-00 ***First Observed:*** 1951-00-00 ***Precision Code:*** M
Directions: High River, in ?.
General Description: Weedy area.
Min Elev. (m): 1028 ***Max Elev. (m):*** 1028 ***Best Source of Info:*** SNDGETUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
SNDGETUCABCA01 Getty, J. UC 09469 0000-00-00 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I12 12 296650 5607350 High River 3 1423
Amaranthus californicus Californian amaranth SRank: S1
+++++++++++++++++++++++

Element Code: PDAMA040A0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1914-08-12
Last Observed: 1914-08-12 ***First Observed:*** 1914-08-12 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Cardson.
General Description: cultivated ground
Min Elev. (m): 1158 ***Max Elev. (m):*** 1158 ***Best Source of Info:*** S14MOOACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14MOOACONCA01 Moodie, M.E. AC none 1914-08-12
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 331300 5451000 Cardston 24 3855
Amaranthus californicus Californian amaranth SRank: S1
+++++++++++++++++++++++

Element Code: PDAMA040A0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1933-08-07
Last Observed: 1933-08-07 ***First Observed:*** 1933-08-07 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Herronton.
Min Elev. (m): 998 ***Max Elev. (m):*** 998 ***Best Source of Info:*** S33GROACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S33GROACONCA01 Groh, H. AC 11485 1933-08-07 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I11 12 327800 5610700 Herronton 1 3856
Amaranthus californicus Californian amaranth SRank: S1
+++++++++++++++++++++++

Element Code: PDAMA040A0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1928-00-00
Last Observed: 1928-00-00 ***First Observed:*** 1928-00-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Manyberries.
Min Elev. (m): 907 ***Max Elev. (m):*** 907 ***Best Source of Info:*** S28CLEACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S28CLAACONCA01 Clarke, S.E. AC 11476 1928-00-00 ?
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 522073 5471783 Manyberries 12 3752
Amaranthus californicus Californian amaranth SRank: S1

Ambrosia acanthicarpa bur ragweed

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowering late July to August
Specific Search Strategies (if any): mostly confined to silty (fine-grained) sand dunes/blowouts/eroding sandy soils, sometimes on slopes. Visible and distinctive at most seasons, even if not flowering. Confined to active dunes.

Element Occurrences:

Element Code: PDAST0C010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-07-19
Last Observed: 1986-07-19 ***First Observed:*** 1986-07-19 ***Precision Code:*** M
Directions: Orion, SW of; Pakowki Sand dunes.
General Description: Slight depression in low sand dunes.
Min Elev. (m): 800 ***Max Elev. (m):*** 880
Other Comments: Dupl. sheet with access. # B86.139.8b ***Best Source of Info:*** S86HRAPMABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA05 Hrapko, J.O. & R. B. Dickinson PM B86.139.89b 1986-07-19 Flowers
S86HRAPMABCA14 Hrapko, J.O., Parker, M.E. PM B86.139.8a 1986-07-19 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Date Source Abstract Code Observer Occurrence Data
Flowers
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1988-07-21
Last Observed: 1988-07-21 ***First Observed:*** 1988-07-21 ***Precision Code:*** S
General Description: sand dunes
Min Elev. (m): 707 ***Max Elev. (m):*** 707 ***Best Source of Info:*** S88ALLPPABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88ALLPPABCA02 Allen, L & MacDonald, C PP 763 1988-07-21
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 436250 5529850 Wolf Island 2 149
Date Source Abstract Code Observer Occurrence Data
Rare-SE Alta sand dunes
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1993-06-14 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; Mule Deer Road, the dugout along.
General Description: subxeric to xeric,disturbed sandy dry barrens;assoc. plants: Helianthus couplandii, Chenopodium pratericlola, Polygonum arenastrum, P. convolvulus, Psoralidium lanceolatum,Cryptantha...open successional meadow
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Size of Occurrence:*** 0.05
Other Comments: Area was heavily trampled by horses and there was very little plant growth.
Management Comments: threatened from encroachment of vegetation on active blowouts, through habitat reduction. ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA12 Macdonald, I.D. PM B94.4.531 1994-07-07 Y
S94MACPMABCA13 Macdonald, I.D. PM B94.4.661 1994-08-31 Y
S94TROPMABCA09 Trottier, Garry PM B94.11.487 1994-07-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536220 5591000 South Saskatchewan River UTM WL 536220 / 5591000;50-27'40"N/110-29'15"W 7 210
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
rare in SNWA; well over 300 plants covering a 20 X 25 m area
Ambrosia acanthicarpa bur ragweed SRank: S2

Element Code: PDAST0C010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1990-07-15
Last Observed: 1990-07-15 ***First Observed:*** 1990-07-08 ***Precision Code:*** S
Directions: Vauxhall, near; Fransaria Dunes.
General Description: Open active dune.
Min Elev. (m): 792 ***Max Elev. (m):*** 792
Management Comments: Most plants were grazed to some extent by cattle. ***Best Source of Info:*** UNDESR02ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90TANPPABCA01 Tannas, K.E. & C. A. PP 787 1990-07-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 437025 5536300 The Grand Forks 3 150
Source Code Author Publisher Year Title
UNDESR02ABCA Eastern Slopes Rangeland Consultants A Fransaria Sand Dune, a Flora Study Near Vauxhall
Date Source Abstract Code Observer Occurrence Data
rare; percentage prominance - 39.9%; several hundreds of plants
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1995-07-13
Last Observed: 1995-07-13 ***First Observed:*** 1993-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, a nip slope along the; Bull Pen, northwest of.
General Description: subxeric sands; in association with Polanisia dodecandra (prov. rare). Sandy loam of steep slope, crest of river valley with Calamovilfa longifolia - Stipa comata - Opunita frag, Ambrosia artemisifolia
Min Elev. (m): 663 ***Max Elev. (m):*** 670
Slope: 58.00 ***Aspect:*** E
Other Comments: The immediate vicinity of this station was originally recorded in the range assessment study of Weerstra & Wilkinson (1993, p. 63-64) ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA13 Macdonald, I.D. PM B95.9.35 1995-07-13 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 523950 5566700 Brush Flats UTM 523950 / 5566700 and UTM WL ca 524100 / 5566700;50-15'08"N/110-39'50"W 8 193
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
rare in SNWA; "very common in active sand...5-15% cover"(from Weerstra & Wilkinson 1993)
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1999-08-11
Last Observed: 1999-08-11 ***First Observed:*** 1997-07-04 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; SE side of.; Old Channel Lake; ~ 9.5 km W of.; S Border of Base; ~ 250 m N of.
General Description: 350 on RoW in wetland, 120 NE of RoW; depressional wetland in Dry Mixed Grass Prairie. Spike Rush CT.
Min Elev. (m): 739 ***Max Elev. (m):*** 739 ***Best Source of Info:*** U99BUS02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 515500 5563500 CFB Suffield 1-5-15-6-W4M, 4-4-15-6-W4M 16 3912
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-11 U99BUS02ABCA Dana Bush site 4-4-15-6- >1000 plants. site 2 1-5-15-6- >300 plants, 80 % in flower? hard rain-difficult to count
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1969-12-08
Last Observed: 1969-12-08 ***First Observed:*** 1969-12-08 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Writing-on-Stone Provincial Park
General Description: Sandy soil, near Milk River. Common, leaves bluish green.
Min Elev. (m): 915 ***Max Elev. (m):*** 915 ***Best Source of Info:*** S69BASACONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BASACONCA03 Bassett, I.J. & B. Baum AC 366101 1969-08-12 common in sandy soil, leaves bluish green
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55
Ambrosia acanthicarpa bur ragweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 009 ***Survey Date:*** 1977-08-21
Last Observed: 1977-08-21 ***First Observed:*** 1977-08-21 ***Actual Mapping Precision (m):*** 550 ***Precision Code:*** M
Directions: Empress, 12 km SSW of; Border, 3.5 km W of.
General Description: active sand dune
Min Elev. (m): 708 ***Max Elev. (m):*** 708 ***Best Source of Info:*** S77BRAUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA08 Bradley, C. Wallis, C. UA 75300 1977-08-21 Y flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 566525 5633600 South Saskatchewan River SE 10-22-1 W4M 7 254
Ambrosia acanthicarpa bur ragweed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 010 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 7.5 km N of; Lost River Valley rim of.
General Description: active blowout
Min Elev. (m): 899 ***Max Elev. (m):*** 899 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 536048 5434735 Lost River 33 4555
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Date Source Abstract Code Observer Occurrence Data
R86WER01ABCA C. Wershler & C. Wallis leading species in active dunes, occasional in stabilized dunes
Ambrosia acanthicarpa bur ragweed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST0C010 ***Occurrence Code #:*** 011 ***Survey Date:*** 1895-08-09
Last Observed: 1895-08-09 ***First Observed:*** 1895-08-09 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Medicine Hat; Police Point.
General Description: sandy ground
Min Elev. (m): 650 ***Max Elev. (m):*** 680 ***Size of Occurrence:*** ***Best Source of Info:*** S95MACNMONCA44
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACNMONCA44 Macoun NM 106554 1895-08-09
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Ambrosia acanthicarpa bur ragweed SRank: S2

Anagallis minima (Centunculus minimus) chaffweed

Natural Region: Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers early July to late August
Specific Search Strategies (if any): search interface along ephemeral wetland borders; may also occur in basin depending on size and configuration. Abundant where found but very tiny.

Element Occurrences:

Element Code: PDPRI01020 ***Occurrence Code #:*** 001 ***Survey Date:*** 1953-08-13
Last Observed: 1953-08-13 ***First Observed:*** 1953-08-13 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Redcliff, 15 km NNW of; BM2570, 2 km W of.
General Description: border of large slough
Min Elev. (m): 784 ***Max Elev. (m):*** 784 ***Best Source of Info:*** S53MOSUAABCA31
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53MOSUAABCA31 Moss, E.H. UA 49282 1953-08-13 flowers; fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500950 5550250 Redcliff 6 172
Anagallis minima chaffweed SRank: S1S2
++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 002 ***Survey Date:*** 1952-08-26
Last Observed: 1952-08-26 ***First Observed:*** 1952-08-26 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Empress, 4 km SW of.
General Description: dry slough bottom
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S52MOSUAABCA24
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52MOSACONCA03 Moss, E.H. AC 484432 1952-08-26
S52MOSUAABCA24 Moss, E.H. UA 14188 1952-08-26 fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 567000 5642200 Empress 1 248
Anagallis minima chaffweed SRank: S1S2
++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 003 ***Survey Date:*** 1998-09-23
Last Observed: 1998-09-23 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Schuler, 13 km NW of; Hwy 41, 8.5km W of.
General Description: In wet area: Eleucharis palustris-Carex atherodes-Carex lanuginosa- Alopecuris aequalis- Polygonum coccineum-Potamogetan gramineus-Deschampsia cespitosa. Wet ecotone above wet area: Carex douglasii- Agrostis scabra- cont'd
Min Elev. (m): 808 ***Max Elev. (m):*** 808
Other Comments: Achillea millefolium- Agropyron smithii-Poa pratensis-Centunculus minimus- Elatine triandra-Eleocharis acicularis. Centunculus minimus will be affected by pipeline, Elatine triandra will not. specimen collected.
Management Comments: Grazing lease and proposed pipeline threaten species. ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 555550 5584350 Lat 50 degrees 24 min 93 s N, Long 110 degrees 13 min 11 s W, LSD 7-9-17-2-W4M 14 3903
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
Date Source Abstract Code Observer Occurrence Data
1997-07-09 U97TAN01ABCA several 1000 individuals, vegetative, flowering, fruiting
Anagallis minima chaffweed SRank: S1S2
++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bain Station, 5 km NE of; Bare Creek, 2.5 km W of.
General Description: occasional. Late season wetland with exposed mud. KP 398.7:Original location disturbed. Seed collected and reseeded
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 548400 5459925 Bare Creek SW 3-15 4-3-4, Km 398.3 & 398.7, LS # 60; 548578.12E, 5459616.13N., NW 10 4-3-4 10 3973
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Anagallis minima chaffweed SRank: S1S2
+++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Milk River Lake, 3.5 km from bridge over; Rd to One-Four, 1.5 km S of.
General Description: RoW narrowed. No seed mix applied.
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551772 5432141 Milk River Lake NW 13-13-1-3-4, 551772.72E, 5432142.28N, LS # 64, Km 426.9 25 4047
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Anagallis minima chaffweed SRank: S1S2
+++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 006 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1997-07-25 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Hwy 555, 15.25 km N of; Red Deer River, 10.25 km N of; Alkali Creek, 1 km E of.
General Description: perimeter of ephemeral wetland in dry mixed grassland; Care pen (6), Agro smi (5), Arte lud (var. gnceph) (2); Hede his, Gnap
pal, Ache mil, Orth lut; mesic; slope various; aspect shallow 1-5 deg.
Min Elev. (m): 732 ***Max Elev. (m):*** 732
Other Comments: specimens collected; UAC and home (Jane Lancaster)
Management Comments: Stake boundaries of areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L15 12 533275 5643175 Alkali Creek 07-08-23-04-W4M, Lat 50 56.420' Lon 110 31.565' 3 5327
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1997-07-25 100% fruiting
1999-08-16 U99GOL01ABCA abundant (thousands)
Anagallis minima chaffweed SRank: S1S2
+++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 007 ***Survey Date:*** 1999-08-17
Last Observed: 1999-08-17 ***First Observed:*** 1997-07-24 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Highway 555, 17.5 km N of; Red Deer River, 12.5 km N of; Alkali Creek, 500 m W of.
General Description: ephemeral wetland west of Alkali Creek in dry mixed grass prairie; Care pen (6), Agro smi (5), Arte lud (var. gnap) (2), Hede his, Gnap pal; subhygric-mesic, concavity (aspect)
Min Elev. (m): 747 ***Max Elev. (m):*** 747
Other Comments: specimens collected
Management Comments: Stake boundaries around areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L15 12 528850 5645550 Highway 555 16-14-23-05-W4M 4 5328
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1997-07-24 100% fruiting
1999-08-17 U99GOL01ABCA > 100
Anagallis minima chaffweed SRank: S1S2
+++++++++++++++++++++++

Element Code: PDPRI01020 ***Occurrence Code #:*** 008 ***Survey Date:*** 1999-08-17
Last Observed: 1999-08-17 ***First Observed:*** 1997-07-25 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Cappon, 12.5 km NE of; Hwy 886, 8.75 km E of.
General Description: south end of an ephemeral wetland in dry mixed grassland; Care peu (5), Dist str (3), Agro smi (3); subhygric-mesic; slope 1-3 degrees; aspect-various
Min Elev. (m): 808 ***Max Elev. (m):*** 808
Other Comments: 6 specimens collected
Management Comments: Stake boundaries of areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M02 12 523250 5650000 Cappon 11-32-23-05-W4M, Lat 51 0.15' Lon 110 40.10' 1 5330
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1997-07-25 100% fruiting
1999-08-17 U99GOL01ABCA population 200-300
Anagallis minima chaffweed SRank: S1S2

Arabidopsis salsuginea mouse-ear cress

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers early in season (late May, early June) in grassland regions
Specific Search Strategies (if any): heavily alkaline areas near perimeter of wetland; quite distinctive sprawling plant and usually occurs in small groups of plants

Element Occurrences:

Element Code: PDBRA05020 ***Occurrence Code #:*** 001 ***Survey Date:*** 1991-07-28
Last Observed: 1991-07-28 ***First Observed:*** 1991-07-28 ***Precision Code:*** S
Directions: La Saline Natural Area
General Description: Xeric tufa dome, La Saline spring with Spergularia marina, Aster ericoides.
Min Elev. (m): 250 ***Max Elev. (m):*** 250 ***Best Source of Info:*** S91TIMPPABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91TIMPPABCA02 Timoney, K. PP 798 1991-07-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414
Source Code Author Publisher Year Title
R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area
Arabidopsis salsuginea mouse-ear cress SRank: S1
++++++++++++++++++++++++

Element Code: PDBRA05020 ***Occurrence Code #:*** 003 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bindloss, 8.5 km SW of; Prince's Springs (formerly Bindloss Depression); Sects 27,28,34,35-Tp21-R3-W4M
General Description: Perm. relatively fresh springs feeding a moder. saline to saline waer body surr. by native mixed grassland; in driest grazed
portion, of dist str-Pucc nut ct; grows most abund. in open unveg. clay flats and their edges
Min Elev. (m): 617 ***Max Elev. (m):***
Other Comments: recommend addtl fencing of spring-dependent vegn; (see Wershler, 1991), protection of basin; no groundwater pumping for injection wells, survey in wetter years
Management Comments: threats from cattle trampling, pumping water out of the springs to water cattle; natural gas well dev't
Best Source of Info: U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 546450 5629250 Bindloss Sects. 27,28,34,35-Tp210R3-W4M; mapped as polygon 33 6040
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis UTM coordinates prov. by CW, 2000-04-10
Arabidopsis salsuginea mouse-ear cress SRank: S1

***Aristida purpurea var longiseta* red three-awn**

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: heads out mid July-August
Specific Search Strategies (if any): search in eroding sandy soils on valley slopes; quite distinctive but usually only found as a scattered few individuals.

Element Occurrences:

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 001 ***Survey Date:*** 1978-08-01
Last Observed: 1978-08-01 ***First Observed:*** 1978-07-25 ***Precision Code:*** M
Directions: Lethbridge Community College, west of
General Description: sandy coulee
Min Elev. (m): 875 ***Max Elev. (m):*** 875 ***Best Source of Info:*** S78GSCALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78GSCALABCA02 Gschaid R. & Sylver Smoliak AL none 1978-08-01 Y headed
S78SMOALABCA07 Smoliak, S. AL none 1978-07-25 Y headed
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 368500 5502500 Six Miles Coulee 2 1353
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 002 ***Survey Date:*** 1997-07-00
Last Observed: 1997-07-00 ***First Observed:*** 1997-06-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Oldman River Valley, E slope of; High Level Bridge, 400 m N of.
General Description: steep to mid dry south facing slopes; Stipa spp., Agropyron smithii, Bouteloua gracilis, Koeleria
Min Elev. (m): 830 ***Max Elev. (m):*** 830 ***Aspect:*** S
Other Comments: Specimen seen by A.J.G. ***Best Source of Info:*** U97ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 366200 5506900 Lethbridge 17 3787
Source Code Author Publisher Year Title
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
U97ERN01ABCA Reg Ernst numerous
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 003 ***Survey Date:*** 1997-07-00
Last Observed: 1997-07-00 ***First Observed:*** 1997-06-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Lethbridge; Oldman River Valley, E slopes of. Community College, 1.5 km NW of.
General Description: steep and moderate dry south facing slopes; Stipa spp., Agropyron smithii, Bouteloua gracilis, Koeleria
Min Elev. (m): 850 ***Max Elev. (m):*** 850 ***Aspect:*** S
Other Comments: Specimen seen by A.J.G. ***Best Source of Info:*** U97ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 368175 5502850 Lethbridge 3TM 83648.11 5505255.48; 83776.12 5504956.20 23 3794
Source Code Author Publisher Year Title
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
U97ERN01ABCA Reg Ernst numerous; locally abundant
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~23km SE of; Hwy 1; ~15.5km S of; S Saskatchewan River; ~1.5km N of.
General Description: 29 plants. In thin soils on crest of S facing slope. Original location disturbed. Seed collected and reseeded. Robinson coulee.
Min Elev. (m): 777 ***Max Elev. (m):*** 777
Other Comments: note: utm's were given as a range therefore include these coordinates although they are only a few meters different- 499446.99E, 5542045.36 N ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 499362 5542098 S. Saskatchewan River LS # 45- 299.8 km-NW 26 12 8 4. 6 3959
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bowell; ~15km SW of; S. Saskatchewan River; on N shore of.
General Description: North shore of S Saskatchewan River. Original location disturbed. Seed collected and reseeded. Robinson coulee. 14 plants.
Min Elev. (m): 671 ***Max Elev. (m):*** 671
Other Comments: UTM given does not coorespond to N shore (it is S shore). Dot plotted on N. shore. UTM of dot = 500275E, 5540625. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bullshead Creek; ~8.5km W of; Fitzgerlad; ~4.75 km SE of.
General Description: 1 plant, upper slope of Robinson's Coulee; off RoW. 5 m E of RoW, population avoided.
Min Elev. (m): 785 ***Max Elev. (m):*** 785
Other Comments: Plotted as site #24 (see B95WIL01ABCA). ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 516000 5522400 Fitzgerald LS#49; km:326.1; NE 29 10-6-W4 7 3961
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Aristida purpurea var longiseta red three-awn SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA0K0W1 ***Occurrence Code #:*** 007 ***Survey Date:*** 1963-08-28
Last Observed: 1963-08-28 ***First Observed:*** 1963-08-28 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Lethbridge; Martha Centre; Coulee W of.
General Description: On grassland slopes to Oldman River (off W end of 12th Ave S); several patches in Stipa-Bouteloua natural grassland known to A. Johnston for some years but not present elsewhere.
Min Elev. (m): 860 ***Max Elev. (m):*** 890 ***Best Source of Info:*** S63DORACONCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S63DORACONCA09 Dore, W.G., Alex Johnston & H.T. Allan AC 210316 1963-08-28 3 rep. & root; several patches
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 367350 5504700 Lethbridge 3 1354
Aristida purpurea var longiseta red three-awn SRank: S1

Asclepias viridiflora green milkweed

Natural Region: Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowers late June to early July
Specific Search Strategies (if any): search in coarse-grained sands and gravelly sands on southerly facing slopes; very distinctive and quite visible beyond the flowering season.

Element Occurrences:

Element Code: PDASC02260 ***Occurrence Code #:*** 001 ***Survey Date:*** 1999-07-22
Last Observed: 1999-07-22 ***First Observed:*** 1941-07-13 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Writing On Stone Provincial Park, 25 miles East of Milk RIver.
General Description: dry hillside, mixed prairie; Hoodoo Trail, start of (near group campsite A) and near viewpoint
Min Elev. (m): 922 ***Max Elev. (m):*** 922 ***Aspect:*** S ***Best Source of Info:*** S77BRUDBONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S41SEXALABCA01 Sexmith, J.J. AL 4683 1941-07-13
S41SEXALABCA02 Sexmith, J.J. AL 4683 1941-07-13
S58BOIACONCA02 Boivin, Bernard & J.-M. Perron AC 127571 1958-06-27
S58BOIUAABCA09 Boivin, Bernard, Perron, J.-M. UA 73558 1958-06-27 Y flowers
S58MOSUAABCA31 Moss, E.H. UA 14579 1958-08-24 Y fruits
S58MOSUAABCA32 Moss, E.H. UA 14578 1958-08-24 Y fruits; remains of flowers
S75KLAUAABCA11 Klar, Andrew UA 80686 1975-07-23 Y flowers
S77BRUDBONCA01 Brunton, D. F. DB none 1977-09-24 Y scattered fairly commonly
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 453702 5436309 Writing-on-Stone Provincial Park 38 5227
Source Code Author Publisher Year Title
F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)
Date Source Abstract Code Observer Occurrence Data
1999-07-22 F99GOU01ABCA J. Gould sandy soil with Linu lew, Stip com, Cala lon, Arte fri etc.; Liat spi, Stip vir; 13 plants-2 in bloom; 453702 5436309 & 454715 5436633
Asclepias viridiflora green milkweed SRank: S1
+++++++++++++++++++++++

Element Code: PDASC02260 ***Occurrence Code #:*** 002 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1979-08-14 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 0.5 km W of; USA border.at; and area about.
General Description: sandy soil; dry-sandy loam-in stand of Yucca glauca; assoc. sp.: Yucca glauca
Min Elev. (m): 846 ***Max Elev. (m):*** 876 ***Best Source of Info:*** S79WALUAABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA12 Wallis, C., Woems, N. UA 84165 1979-08-14 Y fruit; dehisced fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540550 5427325 Lost River 46 4547
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Asclepias viridiflora green milkweed SRank: S1
+++++++++++++++++++++++

Element Code: PDASC02260 ***Occurrence Code #:*** 003 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 8 km SSW of; Lost River Valley, slope of.
General Description: sandy soil
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 536900 5433050 Lost River 49 4550
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Asclepias viridiflora green milkweed SRank: S1

***Aster campestris* meadow aster**

Natural Region: Foothills Fescue Grassland, Mixedgrass
Habitat: Grassland
Phenology: flowers late July, August, sometimes into September
Specific Search Strategies (if any): lusher slopes in fescue grassland; quite visible and distinctive when in flower.

Element Occurrences:

Element Code: PDASTOTOF0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1950-08-29
Last Observed: 1950-08-29 ***First Observed:*** 1950-08-29 ***Precision Code:*** M
Directions: Blairmore
General Description: railway
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310 ***Best Source of Info:*** S50MOSUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50MOSNMONCA01 Moss, E.H. & J.H. W. NM 236369 1950-08-29
S50MOSUAABCA01 Moss, E.H.; J.H.W. UA 17217 1950-08-29 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 683400 5498650 Blairmore 6 825
Aster campestris meadow aster SRank: S2
+++++++++++++++++++++++

Element Code: PDASTOTOF0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1956-07-31
Last Observed: 1956-07-31 ***First Observed:*** 1897-08-11 ***Precision Code:*** M
Directions: Coleman, 4 mi W of; Crownest Lake, E of; Chinook Cabins
General Description: rocky plateau
Min Elev. (m): 1349 ***Max Elev. (m):*** 1349 ***Best Source of Info:*** S56HERUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S56HERUAABCA02 Hermann, F.J. UA 17213 1956-07-31
S97MACNMONCA01 Macoun, NM 102309 1897-08-11 GWD
S97MACNMONCA02 Macoun, J. NM 102307 1897-08-11 GWD
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G10 11 674150 5500600 Sentinel 9 847
Aster campestris meadow aster SRank: S2
+++++++++++++++++++++++

Element Code: PDASTOTOF0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1978-08-23
Last Observed: 1978-08-23 ***First Observed:*** 1978-08-23 ***Precision Code:*** S
Directions: Old Man River; tributary to the Callum Creek
General Description: deep loam, well watered soil; Festuca scabrella meadow
Min Elev. (m): 1516 ***Max Elev. (m):*** 1516 ***Best Source of Info:*** S78JONUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S63DORACONCA06 Dore, W.G. & Tusko, F. AC none 1963-08-14
S78JONUCABCA01 Jonker, P. & D. Cressman UC 43054 1978-08-23 Occasional; [90%]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 708000 5535300 Callum Creek UTM 11U QF 080353; 12 885
Date Source Abstract Code Observer Occurrence Data
occasional, [90%]
Aster campestris meadow aster SRank: S2
+++++++++++++++++++++++

Element Code: PDAST0T0F0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1988-07-13
Last Observed: 1988-07-13 ***First Observed:*** 1988-07-13 ***Precision Code:*** M
Directions: Waldron; South end of
General Description: In good condition festuca grassland.
Min Elev. (m): 1430 ***Max Elev. (m):*** 1430
Management Comments: An upland area, little used by livestock; cattle tend to hang in valleys below. Thus not likely to be grazed out. ***Best Source of Info:*** S88TANPPABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88TANPPABCA01 Tannas. K.E. & C. A. Tannas PP 757 1988-07-13 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 702150 5525750 Whaleback Ridge 14 887
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
a few sporadically occurring individuals(UNDTAN01ABCA).
Aster campestris meadow aster SRank: S2
++++++++++++++++++++++

Element Code: PDAST0T0F0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1960-08-02
Last Observed: 1960-08-02 ***First Observed:*** 1960-08-02 ***Precision Code:*** M
Directions: at border crossing Carway
General Description: meadow
Min Elev. (m): 1358 ***Max Elev. (m):*** 1358 ***Best Source of Info:*** S60DORACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S60DORACONCA01 Dore, W. & Breitung AC 153327 1960-08-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 326100 5429900 Carway 26 965
Aster campestris meadow aster SRank: S2
++++++++++++++++++++++

Element Code: PDAST0T0F0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1963-08-14
Last Observed: 1963-08-14 ***First Observed:*** 1963-08-14 ***Precision Code:*** M
Directions: Lundbreck, 12 miles north of;Old Man River, near.
General Description: native grassland
Min Elev. (m): 1219 ***Max Elev. (m):*** 1219 ***Best Source of Info:*** S63DORACONCA06
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 693050 5496300 Gold Creek-Livingston Range Site 41 on air photo. 23 839
Aster campestris meadow aster SRank: S2
++++++++++++++++++++++

Element Code: PDAST0T0F0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1988-08-10
Last Observed: 1988-08-10 ***First Observed:*** 1988-08-10 ***Precision Code:*** S
Directions: North Fork Milk River- A
General Description: Fescue grassland.
Min Elev. (m): 1325 ***Max Elev. (m):*** 1325 ***Best Source of Info:*** S88WEEPPABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88WEEPPABCA04 Weerstra, A. PP 000756 1988-08-10
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 359350 5439000 North Milk River Plot 46b 6 924
Aster campestris meadow aster SRank: S2

Aster pauciflorus few-flowered aster

Natural Region: Northern Fescue Grassland, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers early July to August
Specific Search Strategies (if any): alkaline, sandy seepage, especially in springs and along the borders of alkali wetlands; found in upland wetlands and in coulee springs. May be abundant and quite visible where found. Additional populations in Central Aspen Parkland.

Element Occurrences:

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1985-08-17
Last Observed: 1985-08-17 ***First Observed:*** 1985-08-17 ***Precision Code:*** M
Directions: Mirror, 8 km SE of; Buffalo Lake, S side of.
General Description: Alkaline Flat
Min Elev. (m): 790 ***Max Elev. (m):*** 790 ***Best Source of Info:*** S85BIRCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85BIRCFABCA01 Bird, C.D. CF 860168 1985-08-17 flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A07 12 365000 5809900 Buffalo Lake 1 2318
Aster pauciflorus few-flowered aster SRank: S1
+++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1978-07-05
Last Observed: 1978-07-05 ***First Observed:*** 1978-07-05 ***Precision Code:*** M
Directions: Wainwright, about 6 mi. S & 3 mi. E of; Rough Lake.
General Description: Plants were growing on shore of lake.
Min Elev. (m): 655 ***Max Elev. (m):*** 655
Other Comments: Det. by K. Tannas; specimen housed at East Slopes Rangeland Consultants herbarium; detailed inventory data can be obtained from Barry Adams or Chuck Richardsons, Public Lands Division. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 513750 5843150 David Lake 36 303
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
several sporadiclly occurring individuals; flowering
Aster pauciflorus few-flowered aster SRank: S1
+++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1977-08-13
Last Observed: 1977-08-13 ***First Observed:*** 1977-08-13 ***Precision Code:*** M
Directions: Dry Island Provincial Park
General Description: badland slope
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S77BRAUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA02 Bradley, C. UA 75724 1977-08-13 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297
Date Source Abstract Code Observer Occurrence Data
flowers
Aster pauciflorus few-flowered aster SRank: S1
+++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Altario south wetlands; 2.25 km NW of Altario; Sect 23-Tp34-R2-W4M
General Description: successive bands of halophytic vegetation along shores of hypersaline (unveg.) ponds
Min Elev. (m): 732 ***Max Elev. (m):***
Management Comments: impact of heavy grazing; groundwater pumping should not occur ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Altario North wetlands, 5.25 km NE of Altario; & Lakevold Springs & associated wetlands, 6.5 km NW of Altario; domed moderately saline springs
General Description: in springs and wet meadow outflows from springs
Min Elev. (m): 693 ***Max Elev. (m):*** 701
Other Comments: locally common
Management Comments: impact of heavy grazing; groundwater pumping should not occur ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 556000 5758550 Altario Sect. 31-Tp34-R1-W4M; Sect. 2 & Sect.11-Tp35-R2-W4M 5 5962
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: MD of Provost; Cadogan, 12.75 km SW of; Sect. 4, 6, 7 in Tp38-R4-W4M
General Description: non-saline backshore of saline ponds, alkali shores
Min Elev. (m): 648 ***Max Elev. (m):***
Management Comments: heavy grazing pressure on part of shoreline; recommend retain with sufficient setback to reduce adverse effects ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D02 12 530100 5787000 Cadogan Sects. 4,6,7 in Tp38-R4-W4M (Multipolygon) 8 5975
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpublished report
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cipher Lake, 5 km ESE of Chauvin; Tp43-R1-W4M
General Description: lush backshore of temporary hypesaline shallow water body
Min Elev. (m): 594 ***Max Elev. (m):***
Other Comments: cattle should continue to be excluded from site; retain as nat'l water body with sufficient setback
Management Comments: some cultiv. behind backshore, but separated from backshore by nat'l veg.; current mgmt practices compatible ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 563000 5837700 Cipher Lake Tp43-R1-W4M; mapped as polygon 18 5990
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report in-house
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Empress Springs, 5 km NW of Empress; N side of Red Deer River; Sects. 21 & 22-Tp23-R1-W4M
General Description: valley springs, diverse, slightly to moderately saline
Min Elev. (m): 594 ***Max Elev. (m):***
Other Comments: need to protect springs & groundwater sources; no groundwater pumping for injection wells; reduce grazing press. on W side of sect. line
Management Comments: heavy grazing may be detrimental in spring ecosystems ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 565000 5647350 Empress Sect. 21 & 22-Tp23-R1-W4M 31 5996
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See publish. report in-house
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Gooseberry Lake, 13 km N of Consort; Tp36-R5-6-W4M
General Description: permanent saline lake with narrow to broad unvegetated shore, N shore of lake
Min Elev. (m): 700 ***Max Elev. (m):***
Other Comments: Mapped as polygon
Management Comments: protect wetland basin with sufficient setback; no graoundwater pumping for injection wells s/b allowed close to springs ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D02 12 519725 5773850 Gooseberry Lake Mapped as polygon 3 4421
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report in-house
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Irma-Jarrow Lakes, 10 km SW of Irma; Sect. 10, 11,15-Tp45-R10-W4M
General Description: semi-perm. hypersaline lakes, and flowing, domed, moder. saline springs; surround. by natural sandy parkland
Min Elev. (m): 640 ***Max Elev. (m):***
Other Comments: retain as water body with sufficient setback; no groundwater pump. for inject. wells; reduce grazing in parts; survey in wet periods
Management Comments: heavy grazing in some springs ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D14 12 475250 5858000 Irma-Jarrow Lakes Sect. 10, 11, 15-Tp45-R10-W4M; polygon 5 5997
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Leane Lake; 2.5 km SW of Dilberry PP; Tp41-R1-W4M
General Description: drier outer shores of hypersaline, semipermanent lake
Min Elev. (m): 617 ***Max Elev. (m):*** 617
Other Comments: recommend retain as nat'l water body with sufficient setback
Management Comments: relat. undisturbed basin & lakeshore; nearby petroleum development ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 564750 5824000 Leane Lake Tp41-R1-W4M; mapped as polygon 19 6004
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: "Neutral Hills Northwest"; [Special Area #4]; 10 km NW of Gooseberry Lake PP; Sects. 2 & 11-Tp37-R7-W4M
General Description: alkaline shore of saline, semi-permanent lake
Min Elev. (m): 724 ***Max Elev. (m):*** 724
Other Comments: recommend addit'l monitoring of site over time to assess significance
Management Comments: considerable oil development in/around wetland; heavey cattle use in places ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D02 12 507000 5778550 "Neutral Hills Northwest" Sect. 2 & 11-Tp37-R7-W4M; mapped as polygon 9 6006
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report in-house
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Consort, 12.5 km NW of; "Neutral Hills South"; "Lake A"; Sects. 3 & 4-Tp36-R7-W4M

General Description: moist shores and creek edges

Min Elev. (m): 750 ***Max Elev. (m):*** 750

Other Comments: recommend retain as nat'l water body with suffic. setback; addit'l site monitoring

Management Comments: locally heavy grazing along shore but otherwise compatible with ecosystem maintenance; petrol. dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D02 12 503900 5768075 "Neutral Hills Lake A" 4-36-7 W4M; 110 56/52 04; UTM 503414/5767401; mapped as polygon 5 4594

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl. report in-house

Aster pauciflorus few-flowered aster SRank: S1

++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Consort, 12.5 km NW of; "Neutral Hills South"; "Lake B1"; sects. 16 & 17-Tp36-R7-W4M

General Description: moist shores of hypersaline, semi-permanent ponds, and along creek

Min Elev. (m): 750 ***Max Elev. (m):*** 750

Other Comments: recommend retain as nat'l water body with suffic. setback; addit'l monitoring to assess site over time

Management Comments: locally heavy grazing but mgmt mostly compatible with ecosystem mainten.; petrol. dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D02 12 503825 5770150 "Neutral Hills Lake B1" 9-7-36 W4M; 52 04/110 57; 503413/5769019 ; mapped as polygon 6 4595

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl report in-house

Aster pauciflorus few-flowered aster SRank: S1

++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M

General Description: diverse moderately saline spring along uphill springline, rel. wet ct

Min Elev. (m): 640 ***Max Elev. (m):*** 640

Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells

Management Comments: heavy cattle grazing in one spring; adj. petroleum development ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl. report in-house

Aster pauciflorus few-flowered aster SRank: S1

++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tp42 & 43-R1-W4M
General Description: forb-rich meadows assoc. with with permanent, moder. saline springs
Min Elev. (m): 600 ***Max Elev. (m):*** 600
Other Comments: recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgt; confine cottage area
Management Comments: threats due to cattle grazing, OHV use, expansion of cottage area ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report in-house
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Consort, NE of; Sounding Lake; Tps 36 & 37-R4-W4M
General Description: drier shores of lake basin
Min Elev. (m): 660 ***Max Elev. (m):*** 660
Other Comments: recommend protectn of wetland basin, fencing & changes in grazing mgt, oil well dev't kept out of basin, no groundwater pumping for injection wells
Management Comments: threats from oil well dev't, grazing & cultivation ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D01 12 535350 5779550 Sounding Lake Polygon 2 4602
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Metiskow, 2.5 km S of; Sunken Lake; Tp39-R5-W4M
General Description: temporary, hypersaline lake in deep basin; in rel. dry vegetation zone
Min Elev. (m): 670 ***Max Elev. (m):*** 670
Other Comments: recommend: retain as nat'l water body with sufficient setback; addit'l monitoring of site for changes in grazing levels, long-term assess., no groundwater pumping for injection wells
Management Comments: threats from further clearing & cultivn; nearby petroleum dev't; some light grazing on backshore ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D07 12 523550 5802000 Sunken Lake Polygon 7 4604
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl rept
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M
General Description: extensive valley spring, moder. saline; wetter parts of spring
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Management Comments: current management consistent with protection, i.e., no cattle grazing, no groundwater pumping ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl rept in-house
2000-04-10 EO UTM coordinates suppl by C Wallis
Aster pauciflorus few-flowered aster SRank: S1
++++++++++++++++++++++++

Element Code: PDAST0T2B0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Wainwright, S of, & N of Metiskow; David Lake; Tps 41, 42-R5-W4M
General Description: wet saline and subsaline meadows round lake; higer subsaline edges and on hummocks
Min Elev. (m): 665 ***Max Elev. (m):*** 665
Other Comments: recommend protect entire wetland basin with suffic. setback; reduce grazing pressure on wet meadow cts to W of lake
Management Comments: ecological reserve ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526500 5826250 David Lake 38 305
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house
Aster pauciflorus few-flowered aster SRank: S1

Astragalus kentrophyta var kentrophyta prickly milk vetch

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowers late May to early July
Specific Search Strategies (if any): search in eroding sandy soils on valley slopes; quite distinctive and sometimes occurs in moderate sized groups. Visible before and after floweing due to distinctive sharp-pointed leaves.

Element Occurrences:

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 001 ***Survey Date:*** 1976-07-00
Last Observed: 1976-07-00 ***First Observed:*** 1976-07-00 Precision ***Code:*** M
Directions: Suffield Military Reserve, in the; South Saskatchewan River, on the; Drowning Ford, N of.
General Description: Sandy dry uplands. Revegetated (mostly native grasses), old cultivation.
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** S76CORUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76CORUAABCA03 Corbin, J. & D. Jacques UA 90245 1976-07-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 529950 5589700 Drowning Ford 50 27/110 34 1 186
Date Source Abstract Code Observer Occurrence Data
Basifixed hairs, 3 to 4 ovules and an apparent white banner. This does not agree w/ description of var. douglasii, the most likely variety. Flowers and fruits.
Astragalus kentrophyta var kentrophyta SRank: S1S2
+++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 002 ***Survey Date:*** 1946-07-30
Last Observed: 1946-07-30 ***First Observed:*** 1932-06-24 Precision ***Code:*** M
Directions: Milk Rver, along; Milk River the town, near.
General Description: In sand, among rocks
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044 ***Best Source of Info:*** S32MCCUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S32MCCUAABCA01 McCalla, W.C. UA 60323 1932-06-24 Flowers
S46MOSUAABCA02 Moss, E.H. UA 11675 1946-07-30 fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 420000 5444100 Milk River Town 4 914
Astragalus kentrophyta var kentrophyta SRank: S1S2
+++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 003 ***Survey Date:*** 1971-05-23
Last Observed: 1971-05-23 ***First Observed:*** 1932-06-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Writing-on-Stone Provincial Park
General Description: Between rock outcrops; on loose sand.
Min Elev. (m): 922 ***Max Elev. (m):*** 922 ***Best Source of Info:*** S71KUIULABCA38
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S32WHIACONCA02 White, R.M. AC none 1932-00-00
S32WHIALABCA03 White, R.M. AL 555 1932-06-28
S39SKOALABCA01 Skoglund, N.A. AL 1190 1939-06-09
S41SEXALABCA06 Sexmith, J.J. AL none 1941-07-13
S58BOIACONCA03 Boivin, B. & J.M. Perron AC none 1958-06-26
S58BOIUAABCA01 Boivin, B. & J.M. Perron UA 11676 1958-06-26 flowers
S64DEVACONCA10 de Vries, B. AC 666477 1964-06-12 infrequent
S64DEVUCABCA28 de Vries, B. UC 16460 1964-06-12 Y blooming
S70GILACONCA01 Gillett, J.M. & T.B. Slater AC 610236 1970-06-09 flower has a slight violet tinge
S71KUIULABCA38 Kuijt, J. UL none 1971-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454849 5436708 Writing-on-stone Provincial Park 28 76
Astragalus kentrophyta var kentrophyta SRank: S1S2
+++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 004 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1988-00-00 Precision ***Code:*** M
Directions: Canadian Forces Base Suffield National Wildlife Area, Mule Deer Road, off; Murphys Horn, ca 10 km NW of.
General Description: submesic - xeric sites of aeolian sand plain, dune field blowout & prairie grasslands,hard-packed gravelly,exposed sand in sand blowout areas,rarely on man-made exposed sandy soils
Min Elev. (m): 724 ***Max Elev. (m):*** 724
Other Comments: Wallis, 1994 pers. comm.
Management Comments: threatened by trampling & dune site stabilization succession, & its northern populations are threatened by dune invasion ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536200 5593500 South Saskatchewan River UTM WL ca 536200 / 5593500? 1 204
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
10 plants
Astragalus kentrophyta var kentrophyta SRank: S1S2
++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 005 ***Survey Date:*** 1994-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 Precision ***Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, along the crest of the
General Description: submesic to xeric sites of aeolian sand plain & dune field blowout & prairie grasslands;hard packed or gravelly,exposed sand in sand blowout areas
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Management Comments: threatened by trampling & dune site stabilization succession, & its northern populations are threatened by dune invasion ***Best Source of Info:*** U96MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
SNDTROXXXXCA01 Trottier XX none 0000-00-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 546980 5605555 Middle Sand Hills UTM WM 546980 / 5605555 3 217
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
very small population, and scarce in SNWA
Astragalus kentrophyta var kentrophyta SRank: S1S2
++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 006
Identification OK?: ***Survey Date:*** 1986-07-10
Last Observed: 1986-07-10 ***First Observed:*** 1986-07-10 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Milk River, 30 km WSW of; North Milk River, 2 km S of.
General Description: eroded badland slopes, rocky outcrops and gullies; associated with Stipa comata, Hordeum jubatum, Agropyron dasystachyum and Oryzopsis hymenoides
Min Elev. (m): 1150 ***Max Elev. (m):*** 1150 ***Aspect:*** W ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 391125 5441600 North Milk River SW16-2-19 W4M 14 5069
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Astragalus kentrophyta var kentrophyta SRank: S1S2
++++++++++++++++++++++

Element Code: PDFAB0F4J7 ***Occurrence Code #:*** 007
Identification OK?: ***Survey Date:*** 1986-07-10
Last Observed: 1986-07-10 ***First Observed:*** 1986-07-10 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Milk River, 30 km W of; North Milk River, 0.5 km S of.
General Description: flat saline terrace; associated with Poa interior, Heterotheca villosa, Poa sandbergii and Koeleria macrantha
Min Elev. (m): 1105 ***Max Elev. (m):*** 1105 ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 391950 5443200 North Milk River SE21-2-19 W4M 15 5070
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Astragalus kentrophyta var kentrophyta SRank: S1S2

Astragalus lotiflorus low milk vetch

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers late May to mid-June
Specific Search Strategies (if any): also in sand dune blowouts, quite often gravelly; look for small eroding patches or disturbance patches in sandy/gravelly grassland; sometimes difficult to see since it occurs in small numbers

Element Occurrences:

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1988-08-05
Last Observed: 1988-08-05 ***First Observed:*** 1988-08-05 ***Precision Code:*** M
Directions: Turin Dunes
General Description: Blowout
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Best Source of Info:*** S88WEEPPABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88WEEPPABCA03 Weerstra, A. PP 693 1988-08-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 388700 5526000 Turin 2 1399
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area
General Description: submesic to xeric sites on rolling ground moraine, glaciofluvial outwash plain and interdunal plain prairie grasslands
Min Elev. (m): 648 ***Max Elev. (m):*** 648
Other Comments: at northern limit of its range ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526000 5573000 Cottonwood Grove UTM WL 526000 / 5573000; 526500/556700 9 194
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-06-08 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area
General Description: from submesic to xeric sites on the rolling ground moraine, glaciofluvial outwash plain and interdunal plain prairie grasslands.
Sandy interdunal plain with heavy grazing: Agropyron dasystachyum - Calamovilfa longifolia community.
Min Elev. (m): 700 ***Max Elev. (m):*** 700
Other Comments: at northern limit of its range ***Best Source of Info:*** U96MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94CANPMABCA01 Canadian Wildlife Service, PM B94.11.105 1994-06-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 548500 5606000 Middle Sand Hills UTM WM 548500 / 5606000; 50-36'15"N/110- 18'45"W. 4 218
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1995-00-00

Last Observed: 1999-50-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S

Directions: Canadian Forces Base Suffield National Wildlife Area; Bull Pen, about 1.5 km west of

General Description: gravel at mid-slope

Min Elev. (m): 663 ***Max Elev. (m):*** 663

Other Comments: at Northern limit of its range ***Best Source of Info:*** U96MAC01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188

Source Code Author Publisher Year Title

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

Date Source Abstract Code Observer Occurrence Data

rare in SNWA; 12 plants

Astragalus lotiflorus low milk vetch SRank: S2

++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1964-05-20

Last Observed: 1964-05-20 ***First Observed:*** 1964-05-20 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M

Directions: Grassy Lake, village

General Description: prairie

Min Elev. (m): 808 ***Max Elev. (m):*** 808 ***Best Source of Info:*** S64SEXALABCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S64SEXALABCA01 Sexsmith, J.J. AL 4440 1964-05-20 Y blooming

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E13 12 449725 5519350 Grassy Lake 6 152

Astragalus lotiflorus low milk vetch SRank: S2

++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1953-07-07

Last Observed: 1953-07-07 ***First Observed:*** 1953-07-07 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M

Directions: Turin

General Description: prairie

Min Elev. (m): 834 ***Max Elev. (m):*** 834 ***Best Source of Info:*** S53SEXALABCA04

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S53SEXALABCA04 Sexsmith, J.J. AL 4439 1953-07-07 Y fruiting

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H15 12 390650 5536000 Turin 9 1404

Astragalus lotiflorus low milk vetch SRank: S2

++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1997-05-29

Last Observed: 1997-05-29 ***First Observed:*** 1997-05-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: CFB Suffield, SE side of , ~ 2.5 km E of; Old Channel Lake, 4 km NE of

General Description: Stipa-Bouteloua gracilis community, Koelaria macrantha

Min Elev. (m): 701 ***Max Elev. (m):*** 701

Slope: 5.00 ***Aspect:*** s

Other Comments: specimen collected, dry sandy soil

Management Comments: Threats: pipeline and grazing ***Best Source of Info:*** U97AXY03ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L07 12 529600 5566854 Bush Flats 21 3907

Source Code Author Publisher Year Title

U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline

Date Source Abstract Code Observer Occurrence Data

1997-05-29 U97AXY03ABCA Ann Smreciu 6 plants on pipeline, vegetative, flowering, 1 seed

Astragalus lotiflorus low milk vetch SRank: S2

++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00

Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: N end Milk River Lake, 2 km S of; Hwy 48, 1.9 km W of.

General Description: 8 plants on RoW, locally common. Uplands, south of Cypress Hills. Original location disturbed. Seed collected and reseeded.

Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Best Source of Info:*** U96EXP01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E01 12 553415 5428643 Milk River Lake 19 3966

Source Code Author Publisher Year Title

U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project

Astragalus lotiflorus low milk vetch SRank: S2

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Milk River Lake, 1 km N W of NW corner.
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552400 5431350 Milk River Lake LLD 24, 13,12 1-3-4, Km 425-432, LS # 65-64 27 4076
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Medicine Hat, 18 km W of, S. Sask. River, 1.25 km S. of.
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 501650 5538500 South Saskatchewan River NW 13 12-8-4 21 4103
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1970-06-09
Last Observed: 1970-06-09 ***First Observed:*** 1970-06-09 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Hilda Community Pasture; SW of Hilda.
General Description: grassland
Min Elev. (m): 790 ***Max Elev. (m):*** 790 ***Best Source of Info:*** S70HRAPMABCA26
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70HRAPMABCA26 Hrapko, J.O., Wyn-Evans, T.C. PM B70.18.17 1970-06-09 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 559150 5585150 Schuler 50 25/110 10 11 214
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1994-06-01
Last Observed: 1994-06-01 ***First Observed:*** 1994-06-01 ***Actual Mapping Precision (m):*** 350 ***Precision Code:*** M
Directions: Buffalo Road; ~5.1km E of; North Saskatchewan River; ~500m W of.
General Description: sandy slope. Stipa comata-Agropyron dasystachyum-Koeleria macrantha community.
Min Elev. (m): 630 ***Max Elev. (m):*** 630 ***Best Source of Info:*** S94TROPMABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94TROPMABCA07 Trottier, Garry PM B94.11.85 1994-06-01 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526550 5574825 CFB Suffield 50-19'35"N/110-37'40"W 24 4255
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Medicine Hat, 14 km N of city limits; South Saskatchewan River, 4 km W of
General Description: undulating, subxeric sandyloam, in grassland of Needle-and-thread, Sand Grass, Blue Grama, Northern Wheat Grass, Low Sedge, June Grass [community SF7-A]
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Other Comments: ---Wallis & Wershler (1988) indicated threats from cultivation in sandy areas and by encroachment by weeds such as Russian Thistle (Salsola kali) in sandy-gravelly dune slack sites
Management Comments: disturbance upslope by construction could affect this species ---Wallis & Wershler (1988) indicated threats from... ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 523550 5561200 Old Channel Lake NE 30-14-5-4 31 4233
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1996-05-30
Last Observed: 1996-05-30 ***First Observed:*** 1996-05-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Turin, 2.5 km NE of; Oldman River, 11 km N of.
General Description: dry grazed dormant sand dune, sandy dry soil, surrounding vegetation on average shorter than 4 in; Astragalus agrestis, A. crassicarpus, A. drummondii, A. pectinatus, Lesquerella arenosa, Senecio canus, Antennaria sp., Androsace septen-Min
Elev. (m): 823 ***Max Elev. (m):*** 823
Other Comments: trionalis, A. occidentalis, Arabis sp., Glaux maritima
Management Comments: under cattle grazing, also near section that has been cultivated ***Best Source of Info:*** UNDCOR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H16 12 392550 5537600 Turin LSD SW11-11-12-19 W4M 2 4567
Source Code Author Publisher Year Title
UNDCOR01ABCA Corbiere, Adrien & Don MacKay Rare Native Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1996-05-30 UNDCOR01ABCA Adrien Corbiere and Don MacKay 1 plant flowering
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1998-09-23
Last Observed: 1998-09-23 ***First Observed:*** 1997-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Brush Flats, 3.5 km E of; Old Channel Lake, 3 km NE of.
General Description: sandhills; xeric
Min Elev. (m): 700 ***Max Elev. (m):*** 700 ***Aspect:*** N
Other Comments: Specimen has been collected and housed in U of C Herbarium. ***Best Source of Info:*** U98BUS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 529250 5565800 South Saskatchewan River U12 529405/5566138 NAD83; LSD 10-11-15-5- W4M 38 5056
Source Code Author Publisher Year Title
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-00-00 U98BUS01ABCA Dana Bush 6 plants
1998-09-23 U98BUS01ABCA Dana Bush 3 plants on right-of-way and 6 off Row
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1999-07-21
Last Observed: 1999-07-21 ***First Observed:*** 1999-07-21 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bindloss, 6.5 km SW of; CP railway, 2 km N of.
General Description: dry mixedgrass-depression in dry coulee; Arte can-Stip com/Bout gra/Opun pol; Additional species: Cory viv, Coll lin, Hete vil, Plan pat, Firg pum, Orth lut, Hete his, associated with Rare Orobanche lud.
Min Elev. (m): 595 ***Max Elev. (m):*** 595
Other Comments: specimen collected; UAC; 1 individual sited
Management Comments: Stake boundaries around area to be protected ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 544750 5634725 Bindloss 03-16-22-03-W4M 22 5323
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1999-08-16 U99GOL01ABCA 1 individual sighted; 6 vegetative, 11 flowering
Astragalus lotiflorus low milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F4Z0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1999-07-21
Last Observed: 1999-07-21 ***First Observed:*** 1999-07-21 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Cavendish, 7.5 km NE of; Hwy 555, 4.25 km N of.
General Description: dry mixed grass habitat with a shallow coulee running throughout; mesic; Arte can-Bout gra/Stip com-Opun pol: Additional plants:
Psor org, Rosa sp., Arte fri, Euro lan, Carex spp., Cirs vul, Agro smi, Agro pec, Koel mac
Min Elev. (m): 632 ***Max Elev. (m):*** 632
Other Comments: 2 individuals sited (vegetative); 1 on the R.O.W. and 1 off (within 10 m) ***Best Source of Info:*** U99GOL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543150 5636100 Bindloss 14-17-22-03-W4M 30 5502
Source Code Author Publisher Year Title
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way
Astragalus lotiflorus low milk vetch SRank: S2

Astragalus purshii **Pursh's milk vetch**

Natural Region: Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers early (late May to early June)
Specific Search Strategies (if any): flat sandy grassland; fairly common in places; hairy pods quite visible into July

Element Occurrences:

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1979-07-04
Last Observed: 1979-07-04 ***First Observed:*** 1979-07-04 ***Precision Code:*** M
Directions: Sage Creek; facing East.
General Description: Mixed grassland, barren flats
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** E ***Best Source of Info:*** S79WALUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA03 Wallis, C. UA 84611 1979-07-04 Fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552100 5445500 Sage Creek 2 2
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1975-06-23
Last Observed: 1975-06-23 ***First Observed:*** 1975-06-23 ***Precision Code:*** M
Directions: Comrey; roadside, near; Milk River Gorge, near the.
Min Elev. (m): 990 ***Max Elev. (m):*** 990 ***Best Source of Info:*** S75MILULABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75MILULABCA01 Miller & Toth UL none 1975-06-23 100% fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 519073 5441433 Comrey 8 19
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1989-06-15
Last Observed: 1989-06-15 ***First Observed:*** 1989-06-15 ***Precision Code:*** S
Directions: Milk River Natural Area
General Description: In very short vegetation in sandy mixed grassland
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S89WALPPABCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA13 Wallis, C. PP 694 1989-06-15 About 25 plants
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 522923 5427334 Milk River Natural Area LSD 3 17 28
Source Code Author Publisher Year Title
I85WER01ABCA Wershler, C. 1985
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; Francis Peak, near
General Description: Subxeric site
Min Elev. (m): 709 ***Max Elev. (m):*** 709
Other Comments: no other information on the specimen other that one was collected at the study site ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527725 5584250 Twin Peaks UTM WL 527725 / 5584250 10 195
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA; 12 plants; specimen collected at the study site has immature fruits, but also distinctive pubescence and the round-tipped, short leafltes.
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-05-30
Last Observed: 1997-05-30 ***First Observed:*** 1997-05-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: S. Saskatchewan River, 6 km S of; Creek in Bull Spring Coulee, 1 km W of.
General Description: Stipa community/Koel mac grassland; Art fri- Stipcom- koel mac - Bou gra - Agr smi - Sph coc - And sept - Lap pula - Phl hon -Ast mis - Gau coc - Caerex fil - Carex steno . 12 individuals
Min Elev. (m): 770 ***Max Elev. (m):*** 770
Other Comments: Transect coordinates (16-4-24-15-4) on AXYS sheet do not correspond with dot's UTM coordinates ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 540097 5579279 Bull Springs Coulee 17 3910
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
Date Source Abstract Code Observer Occurrence Data
1997-05-30 U97AXY03ABCA Ann Smrecu, Roberta Yakimchuck 2 vegetative; 10 seed
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1997-05-30
Last Observed: 1997-05-30 ***First Observed:*** 1997-05-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Red Deer Lake; ~1.5km NE of.
General Description: Dry grassland; Stipa comata-some bare patches with lichen- Carex fil - Phl hood. 1 individual (Ast pur)
Min Elev. (m): 762 ***Max Elev. (m):*** 762
Slope: 40.00 ***Aspect:*** w
Other Comments: UTM coordinates for dot correspond with dot on aireal photos. Another population: 8-10-16-3-W4M, E542891 N5566854. ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 543125 5577100 Red Deer Lake SE 18-16-3 W4M 19 3914
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
Date Source Abstract Code Observer Occurrence Data
1997-05-30 U97AXY03ABCA fruiting adult.
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 7.5 km S of; Lost River, 2 km NE of.
General Description: sandy soil in heavely grazed grassland
Min Elev. (m): 907 ***Max Elev. (m):*** 907 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538200 5433600 Lost River 8 7
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bain; ~7km NW of; Hwy 48; ~7km W of; Bare Creek; ~2km W of.
General Description: 150 plants in 5m wide band. Uplands, S of Cypress Hills. RoW re-routed around population. Locally common. Scattered viable population.
Min Elev. (m): 1074 ***Max Elev. (m):*** 1074 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 546750 5464000 Bare Creek LS#59;Km:394.2/395.2;LLD:NW28 4-3-4 9 3962
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cressday; ~4.75 km SW of; Hwy 48; ~3.5km W of.
General Description: 26 total: 2 transplants; seed from 21 and 27 plants 60m W of RoW, 33 plants 100m E of RoW. Original location disturbed. Seed collected and reseeded. Locally common. Scattered populations.
Min Elev. (m): 960 ***Max Elev. (m):*** 960
Other Comments: Tshp/Rge coordinates don't match. Changed to SE 23-3-3-4 (LSD8). ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 550892 5452192 Cressday LS#61;km:406.4;LDD:NE 23 3-3-4 20 3963
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cressday; ~'7km SW of; Hwy 48; ~2.8km W of; Sage Creek; ~2.5 km N of.
General Description: 17 total: 3 transplants; seed from 14. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded.
Plants scattered in distribution. Locally common. 36on RoW; 4 transplants; seed collected from 19. (comments..)
Min Elev. (m): 937 ***Max Elev. (m):*** 937
Other Comments: ..Plus 62 W of Row; 44 E of RoW. 25 on RoW: seed collected from 12 plants; 12 plants avoided. Plus 100 plants scattered E & W of RoW. 10 on RoW:2 transplants, 8 seed, 8 E of Row. Tshp/Rg coordinates don't match. Changed to SW 12 3-3-4. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551698 5448829 Sage Creek LS#61;km:409.8;LDD:SW 1 3-3-4/LS#62;km:410.3;SW 12 3-3-4/LS#62;km: 410.9;LLD:NW 1 3-3-4/LS#62;km: 411.3; LLDNW 1 3-3-4/LS#62;km: 411.4; LLDSW 1 3-3-4 21 3964
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Milk River Lake; ~4.5km NW of; Hwy 48; ~2.8 km W of; road to one-four; 1km S of.
General Description: 7 on RoW, uplands; Sof Cypress Hills. Original location disturbed. Seed collected and reseeded. Plants scattered, common locally.
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551906 5432881 Milk River Lake LS#65;km:425-432;LLD 6 1-2-4.Kp 425.9: 551926.7 to 551935.67 E; 5432995.61 to 5433044.76 N; NW 24-1-3-422 3965
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: N end Milk River Lake; ~2km S of; Hwy 48; ~1.9km W of.
General Description: Locally common. Seed collected from 1 plant. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded. Plants scattered.
Min Elev. (m): 884 ***Max Elev. (m):*** 884
Other Comments: UTM:553415E;5428642N. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 553415 5428643 Milk River Lake 19 3966
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
+++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hwy 48; bridge over W arm of Milk River Lake; ~2.5 km SW of.
General Description: Locally common. Seed collected from 1 plant. Uplands; S of Cypress Hills. Original location disturbed. Seed collected and reseeded.
Min Elev. (m): 884 ***Max Elev. (m):*** 884
Other Comments: UTM:552807E;552807N, township & range coordinates don't match. They should be NW 16-1-1-3-4, 1-12-1-3-4, 2-12-1-3-4. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552549 5429156 Milk River Lake NW 11- 6 1-2-4 23 3967
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Milk River Lake, S end of, 1.25 km Wof
General Description: locally common. Seed collected from 1 plant. Uplands, south of Cypress Hills. Original location disturbed. Seed collected and reseeded.
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 554671 5427898 Milk River Lake SE 4-5-1-2-4, 555015.49E, 5427694.39 N- SW8- 6 1-2-4; 32 4068
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Bain, 4.5 km NE of; Bare Creek, 3.25 km W of.
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 548300 5459300 Bain SW 10 4-3-4 19 4142
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Red Deer Lake, 7 km NW of northern tip of lake
General Description: rolling-hilly, subxeric clayloam, in grassland of Needle-and-thread, Blue Grama, Prairie Selaginella, June Grass, Moss Phlox, lichens [communitySF-K2-A]
Min Elev. (m): 762 ***Max Elev. (m):*** 762
Other Comments: 1 plant along southern portion of corridor
Management Comments: disturbance upslope by construction could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 537000 5580725 Red Deer Lake NW 27-16-4-4 21 4248
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 7 km S of; Lost River, 2.5 km NE of.
General Description: sandy soils in heavely grazed grassland
Min Elev. (m): 907 ***Max Elev. (m):*** 907 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 539200 5433625 Lost River 7 6
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Astragalus purshii Pursh's milk vetch SRank: S2
++++++++++++++++++++++

Element Code: PDFAB0F7A0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1999-06-02 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Bindloss, 5.5 km SW of; Hwy 555, 50 m E of.
General Description: dry grassland community on 7 degree hillslope/ 122 deg. aspect; Stip com/ Bout gra/ Agro smi; some Arte fri, Opun poly, and Arte can
Min Elev. (m): 528 ***Max Elev. (m):*** 610
Slope: 7.00 ***Aspect:*** SE
Management Comments: Stake boundary around area to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 546225 5633500 Bindloss 06-10-22-03-W4M, Lat 51 51' 06.6" Lon 110 20' 26.9" 23 5324
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way
Date Source Abstract Code Observer Occurrence Data
1999-06-02 U99GOL02ABCA 1 vegetative
1999-08-16 U99GOL01ABCA 1 individual sighted
Astragalus purshii Pursh's milk vetch SRank: S2

Atriplex canescens **saltbush**

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers May to June
Specific Search Strategies (if any): highly visible at all times of year; may be some taxonomic problems; habitat includes alkali clay flats along badlands.

Element Occurrences:

Element Code: PDCHE04090 ***Occurrence Code #:*** 001 ***Survey Date:*** 1939-08-04
Last Observed: 1939-08-04 ***First Observed:*** 1939-08-04 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Fort Macleod, 4 km S of.
General Description: alkaline flats; clay soil belt
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Best Source of Info:*** S39SSSUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S39SSSUAABCA06 S.S.S. UA 7855 1939-08-04 Y female; fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 325850 5505875 Fort Macleod 1 1368
Atriplex canescens saltbush SRank: SU
+++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 002 ***Survey Date:*** 1977-08-24
Last Observed: 1977-08-24 ***First Observed:*** 1977-08-24 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Morrin Bridge, 2 km W of; Hwy 27.
General Description: eroded bentonitic slopes along roadside
Min Elev. (m): 760 ***Max Elev. (m):*** 760 ***Best Source of Info:*** S77HRAPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77HRAPMABCA04 Hrapko, J.L. & E.E. Beacham PM B77.32.4 1977-08-24 fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P10 12 366575 5723850 Morrin Bridge Recreational Area 51 39/112 56 2 2294
Atriplex canescens saltbush SRank: SU
+++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-07-18
Last Observed: 1995-07-18 ***First Observed:*** 1995-06-03 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Sage Creek, approx. 6 km NE of where Cripple Creek enters; Cressday, approx. 4 km W of; road, south of; stock corrals, near; within Sage Creek ESA
General Description: around east-west alligned saline flats, surrounded by prairie. Ephem. wetlands with standing water only late in season. Very dry ponded site in grazed pasture. Low species div. Soil cracks to 1+cm. On 95/07/18 3-4 cm water at surface.
Min Elev. (m): 960 ***Max Elev. (m):*** 960
Other Comments: round snail shells indicate temporal wetland status; In upland area immediately around temporal ponds. Found growing in disturbed soils. see hardcopy for more info about plant species.
Management Comments: the entire area should be avoided taking into consideration drainage patterns ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 550900 5454400 Cressday in the vicinity of Sec NW 25/NE 26 - Tp3-Rg3-W4M 16 3928
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Date Source Abstract Code Observer Occurrence Data
1995-07-18 B95WIL01ABCA <5-5
Atriplex canescens saltbush SRank: SU
+++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Bleriot Ferry Recreation Area, 2.5 km N of; Red Deer River, W side of, up large coulee
General Description: ravine slope. easterly at 28 degrees. on subxeric gravellyloam, in erosional barrens of soil, Silvery Sagebrush, Slender Wheatgrass, Prickly Pear, Long-leaved Sagewort [community GP6-G]
Min Elev. (m): 723 ***Max Elev. (m):*** 785
Slope: 28.00 ***Aspect:*** E
Other Comments: single shrub
Management Comments: disturbance upslope by construction could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P10 12 368050 5716600 Bleriot Ferry Provincial Recreation Area NW 21-30-21-4 5 4306
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Atriplex canescens saltbush SRank: SU
++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Bleriot Ferry Recreation Area, 4 km N of; Red Deer River, W side of
General Description: river valley slope base, on subxeric clayloam, in erosion barrens of soil, Sand Dropseed, Long-leaved sagewort, Winter Fat, Dragonwort [community GP7-0]
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Other Comments: single shrub
Management Comments: disturbance upslope by construction could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P10 12 369700 5718150 Morrin Bridge Provincial Recreational Area NW 27-30-21-4 4 4247
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Atriplex canescens saltbush SRank: SU
++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 006 ***Survey Date:*** 1991-08-22
Last Observed: 1991-08-22 ***First Observed:*** 1991-08-22 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Tilley, 5 km E of; Highway 1, 100 m S of.
General Description: common; in very dry Fescue prairie with Artemisia spp., Selaginella densa
Min Elev. (m): 747 ***Max Elev. (m):*** 747 ***Size of Occurrence:*** ***Best Source of Info:*** S91BRUDBONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91BRUDBONCA01 Brunton, D. F. and K. L. McIntosh DB none 1991-08-22 Y common
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L15 12 459000 5588900 Tilley 13 5830
Atriplex canescens saltbush SRank: SU
++++++++++++++++++++++

Element Code: PDCHE04090 ***Occurrence Code #:*** 007 ***Survey Date:*** 1977-09-24
Last Observed: 1977-09-24 ***First Observed:*** 1977-09-24 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Comrey, 3 km SE of; Junction of Hwy 887 and 502, 4.5 km SE of; Milk River Canyon, lip of.
General Description: open, arid grassy lip of immense Badlands canyon with Opuntia, Artemesia, Gatierrezia
Min Elev. (m): 991 ***Max Elev. (m):*** 991 ***Size of Occurrence:*** ***Best Source of Info:*** S77BRUDBONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRUDBONCA02 Brunton, D. F. et al. DB none 1977-09-24 Y common
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 522000 5436750 Milk River Canyon 49 05' N, 110 42' W 59 5831
Atriplex canescens saltbush SRank: SU

Atriplex powellii Powell's saltbush

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers May to June
Specific Search Strategies (if any): highly visible at all times of year; may be some taxonomic problems; habitat includes alkali clay flats along badlands.

Element Occurrences:

Element Code: PDCHE041L0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1990-06-22
Last Observed: 1990-06-22 ***First Observed:*** 1987-09-22 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Redcliff, just S of ; South Saskatchewan River, 300m N of.
General Description: on falt bentonitic slopes and hummocks of clay; Foremost formation, down near base of outcrops; plentiful with H. nuttallii, Sarcobatus, Suaeda moquinii
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Best Source of Info:*** S90HUDNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87HUDNMONCA01 Hudson, J.H. NM 528772 1987-09-22
S90HUDNMONCA01 Hudson, J.H. NM 553863 1990-06-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 514900 5544800 Redcliff LSD-11 5-13-6-W4M 9 175
Atriplex powellii Powell's saltbush SRank: S1
++++++++++++++++++++++

Element Code: PDCHE041L0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1967-09-01
Last Observed: 1967-09-01 ***First Observed:*** 1967-09-01 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Rosedale.
General Description: slope of hill; clay soil
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Best Source of Info:*** S67BASUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67BASACONCA02 Bassett, I.J. & F.J. Beales AC none 1967-09-01
S67BASUAABCA01 Bassett, I.J. & F.J. Beales UA 49355 1967-09-01 male and female flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P07 12 386350 5697350 Rosedale 51 25/112 38 6 2285
Atriplex powellii Powell's saltbush SRank: S1
++++++++++++++++++++++

Element Code: PDCHE041L0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1967-09-01
Last Observed: 1967-09-01 ***First Observed:*** 1967-09-01 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Rosedale, 2.5 km NE of.
General Description: edge of hillside, near base; stony clay soil
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Best Source of Info:*** S67BASUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67BASACONCA01 Bassett, I.J. & F.J. Beales AC none 1967-09-01
S67BASUABCA02 Bassett, I.J. & F.J. Beales UA 49356 1967-09-01 flowers
S68BASACONCA01 Bassett, I.J. & C. Frankton AC none 1968-07-18 n=18
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P07 12 388825 5698150 Rosedale 7 2286
Atriplex powellii Powell's saltbush SRank: S1
++++++++++++++++++++++

Element Code: PDCHE041L0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Patricia, 13 km NNW of; Hutterite colony facilities, E of
General Description: shallow depression, with subhygric-mesic clayloam, in drawdown meadow of Western Wheat Grass, Foxtail Barley, Kentucky bluegrass, Open soil, Prostrate Saltbush [community CF1-B]
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Other Comments: 1 plant in 1X1m area, possibly more unrecorded
Management Comments: disturbance to the alkaline barren slopes by construction could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 448625 5629400 Patricia NW 27-21-13-4 12 4246
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Atriplex powellii Powell's saltbush SRank: S1
++++++++++++++++++++++

Element Code: PDCHE041L0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Morrin Bridge Provincial Recreation Area, 6 km S of; Red Deer River, W side of
General Description: river valley slope base, with subxeric clayloam, in erosion barrens of soil, Sand Dropseed, Prairie Sagewort, Winter Fat, Dragonwort; with Wing-fruited Saltbush [community GP7-0]
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Other Comments: 3 plants in 1X3 m area
Management Comments: disturbance to the alkaline barren slopes by construction could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P10 12 369700 5718150 Morrin Bridge Provincial Recreational Area NW 27-30-21-4 4 4247
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Atriplex powellii Powell's saltbush SRank: S1

Atriplex truncata saltbush

Natural Region: Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers in August
Specific Search Strategies (if any): occurs in sandy, gravelly ephemeral alkali wetlands--check the edges of wetlands.

Element Occurrences:

Element Code: PDCHE04230 ***Occurrence Code #:*** 002 ***Survey Date:*** 1969-08-10
Last Observed: 1969-08-10 ***First Observed:*** 1969-08-10 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Wild Horse, 11 km NW of; Hwy 48, near.
General Description: edge of waterpool, disturbed sandy gravelly soil
Min Elev. (m): 884 ***Max Elev. (m):*** 884 ***Best Source of Info:*** S69BASUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BASUAABCA02 Bassett, I.J. & B. Baum UA 49340 1969-08-10 flowers; fruits; only two plants seen
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 554500 5438550 Sage Creek 12 11
Atriplex truncata saltbush SRank: S1

Bacopa rotundifolia **water hyssop**

Natural Region: Dry Mixedgrass
Habitat: Wetland
Phenology: flowers in late July and August
Specific Search Strategies (if any): search recently exundated slough bottoms of shallow marshes.

Element Occurrences:

Element Code: PDSCR06080 ***Occurrence Code #:*** 001 ***Survey Date:*** 1984-08-12
Last Observed: 1984-08-12 ***First Observed:*** 1984-08-12 ***Actual Mapping Precision (m):*** 150 ***Precision Code:*** S
Directions: Bow City, 9 km NE of; Hwy 36, 7.5 km W of.
General Description: shallow marsh, dries up intermittently; Eleocharis palustris-Limosella aquatica community
Min Elev. (m): 777 ***Max Elev. (m):*** 777 ***Best Source of Info:*** S84SANNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S84SANNMONCA01 Sankowski, Tomasz NM 531216 1984-08-12
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I08 12 419775 5592950 Bow City SW 3 Tp18 R16 and NW 34 Tp 17 R 16 W4M; 50 30/112 07 2 1419
Bacopa rotundifolia water hyssop SRank: S1

Bidens frondosa **common beggarticks**

Natural Region: Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: late June-August
Specific Search Strategies (if any): sandy seepage areas in wooded coulees; search in wet wooded areas

Element Occurrences:

Element Code: PDAST180R0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-06-29 ***Precision Code:*** M
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.
General Description: subhygric. shoreline; hygric barrens of Equisetum arvense, Rumex maitimus, Polygonum lapathifolium, Xanthium strumarium, Rorip sylvestris, Juncus tenuis, Ranunculus cymbalaria, Bidens frondosa, Beckmannia syzigachne, Eleocharis palustris
Min Elev. (m): 625 ***Max Elev. (m):*** 630
Other Comments: on western edge of its range ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA09 Macdonald, I.D. PM B94.4.423 1994-06-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526500 5567000 Brush Flats UTM WL ca 526500 / 5567000 12 197
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-07-08 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.
General Description: subhygric meadow of Agropyron smithii, Iva axillaris, Xanthium strumarium, Hordeum jubatum, Rorippa sylvestris, Poa palustris, Rumex martimus, Potentilla anserina, Plant maj, Helianthemum autumnale.
Min Elev. (m): 620 ***Max Elev. (m):*** 710
Other Comments: on western edge of its range ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA10 Macdonald, I.D. PM B94.4.544 1994-07-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-08-29 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along shore and backshore seepage zones of the.
General Description: subhygric measow of Agropyron trachycaulum, Xanithium strumarium, Elymus canadensis, Poa compressa, Artemisia absinthium
Min Elev. (m): 615 ***Max Elev. (m):*** 635
Other Comments: on western edge of its range ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA11 Macdonald, I.D. PM B94.4.628 1994-08-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 528500 5579400 Twin Peaks UTM WL ca 528500 / 5579400; 50-22'05"N/110-35'55"W 14 199
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, 36 km W of
General Description: 3 plants. In gravel along S bank of S. Sask. River, W of RoW, within 10 m buffer zone. Population avoided.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500327 5540006 S.Sask. River NW 14-23 12-8-4; LS # 46, 301.2 km, LLD NW 23 12-8-4 19 3969
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, 35 km W of Southern city limits; Rattlesnake Lake, 1.5 km NEof.
General Description: 2 plants, wetland alluvial fan at Rattlesnake Coulee, off RoW. Protected by silt fencing.
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 501637 5537887 Rattlesnake Lake NW 12-13 12-8-4; LS # 46, 304.1 km, 304.2 km 8 3970
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Patricia; 13 km N of; Hutterite Colony facilities, 700 m E of; Stream ravine basin
General Description: ravine bottom stream and seepage, on subhydric loam, in marsh margin with standing water of Cattail, Common Tall Manna
Grass, Common Great Bulrush [community CF1-F]
Min Elev. (m): 701 ***Max Elev. (m):*** 701
Other Comments: locally abundant, with approx. 300 plants over a 20X40m area, extending beyond RoW
Management Comments: disturbance by construction along the stream channel or upstream could affect this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 448625 5629400 Patricia NW 27-21-13-4 12 4246
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Bidens frondosa common beggarticks SRank: S1
++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1954-08-24
Last Observed: 1954-08-24 ***First Observed:*** 1954-08-24 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Cecil, 5 km S of.
General Description: flats
Min Elev. (m): 724 ***Max Elev. (m):*** 724 ***Best Source of Info:*** S54MOSUAABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S54MOSUAABCA11 Moss, E.H. UA 68422 1954-08-24 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L04 12 456000 5546000 Cecil 4 4472
Bidens frondosa common beggarticks SRank: S1
+++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M
General Description: coulees along valley of S. Sask. River; moist woodland at edge of slightly saline springs
Min Elev. (m): 640 ***Max Elev. (m):***
Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells
Management Comments: heavy cattle grazing in one spring; petroleum dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Bidens frondosa common beggarticks SRank: S1
+++++++++++++++++++++++

Element Code: PDAST180R0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bindloss, west of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M
General Description: coulees with springs along river valley; edges of Acer negundo woodland
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Other Comments: recommend continue to protect springs & groundwater sources; no groundwater pumping for injection wells
Management Comments: current mgmt practice consistent with protectn, i.e., no cattle grazing, no groundwater withdrawal ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis see unpubl report in-house
Bidens frondosa common beggarticks SRank: S1

Boisduvalia glabella smooth boisduvalia

Natural Region: Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: early July to August
Specific Search Strategies (if any): search edges of pools in dried out sandy stream channels and edges and bottoms of sandy ephemeral wetlands; plants are small and easily overlooked

Element Occurrences:

Element Code: PDONA01030 ***Occurrence Code #:*** 001 ***Survey Date:*** 1998-06-23
Last Observed: 1998-06-23 ***First Observed:*** 1989-08-15 ***Precision Code:*** S
Occurrence Type: annual
Directions: Milk River Natural Area; river, S of; entrance, 2nd valley E from; dugout in valley, S of; Ecological Reserve fence, just N of.
General Description: Dessicated stream channel on exundated soils; in a series of small ephemeral pools (10) along stream channel. At edges of pools on exposed mud.
Min Elev. (m): 990 ***Max Elev. (m):*** 990
Management Comments: Size of population appears tied to drought cycles rather than grazing by cattle. Population is being monitored yearly. ***Best Source of Info:*** PNDGOU01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA12 Wallis, C. PP 51 1989-08-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 518873 5430984 Milk River Natural Area LSD 8 10 21
Source Code Author Publisher Year Title
F96GOU01ABCA Gould, J 1996 Field notes
F97GOU01ABCA Gould, J. 1997 Field notes
U89WAL01ABCA Wallis, C. Alberta Forestry, Lands and Wildlife 1989 Flora and Special Features Survey of the Milk River Natural Area
U95EAS01ABCA Eastern Slopes Rangeland Seeds Ltd. 1995 A Five Year Summary of the Range Inventory and Select Species Monitoring on the Milk River Natural Area (1991-95)
Date Source Abstract Code Observer Occurrence Data
Gould 2,687 plants in 1991; 96 in 1992; 256 in 1993; unknown in 1994-95; 61 in 1996, 1139 in 1997, 119 in 1998, 79 in 1999.
Boisduvalia glabella smooth boisduvalia SRank: S2
++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 002 ***Survey Date:*** 1991-07-02
Last Observed: 1991-07-02 ***First Observed:*** 1991-07-02 ***Precision Code:*** M
Directions: S of Seven Persons, Red Rock Coulee Natural Area
General Description: mixed grass prairie; well drained
Min Elev. (m): 985 ***Max Elev. (m):*** 985 ***Best Source of Info:*** S91JOHCFABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91JOHCFABCA06 Johnson, J.D. CF 930096 1991-07-02 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 509073 5499781 Red Rock Coulee Natural Area 49 38/110 52 4 146
Boisduvalia glabella smooth boisduvalia SRank: S2
++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 003 ***Survey Date:*** 1997-07-09
Last Observed: 1997-07-09 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: S. Sask. River, 7 km S of; Creek in Bullsprings Coulee, 5.5 km W of.
General Description: 9 in wetland, 55 E off RoW in second wetland.
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18 3911
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
Date Source Abstract Code Observer Occurrence Data
1997-07-09 U97AXY03ABCA no data available
Boisduvalia glabella smooth boisduvalia SRank: S2
++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Seven Persons, 7.5 km NW of; Fitzgerald station, 2 km SW of.
General Description: 20 plants. Cultivated ephemeral wetland. RoW narrowed. No seed mix applied. Found on muddy shoreline.
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 514695 5525030 Fitzgerald NW 12-5 -11-6-4, Km 323.2, LS# 49 9 3971
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Boisduvalia glabella smooth boisduvalia SRank: S2
+++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Seven persons, 10 km SE of; Fitzgerald, 5.5 km SE of.
General Description: 2 on S side, 7 on N side. Alluvial fan in Robinson Coulee. RoW narrowed. No seed mix applied.
Min Elev. (m): 770 ***Max Elev. (m):*** 770
Slope: 0.00
Other Comments: UTM's given as a range therefore include 516158.04E, 5522288.89N ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 516336 5521991 Fitzgerald NE 9-29- 10-6-4, Km 326.8 & Km 327.1, LS #49;/LS#005;km:327.1;LLD:NE 2910-6-4 10 3972
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Boisduvalia glabella smooth boisduvalia SRank: S2
+++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Basin Station, 5 km NE of; Bare Creek, 2.5 km W of.
General Description: Late season creek with exposed mud.
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 548400 5459925 Bare Creek SW 3-15 4-3-4, Km 393.3 & 398.7, LS # 60; 548578.12E, 5459616.13N., NW 10 4-3-4 10 3973
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Boisduvalia glabella smooth boisduvalia SRank: S2
+++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Milk River Lake, 4 km NW of bridge over; road to One-Four, 1.5 km S of.
General Description: Late season wetland with exposed mud. RoW narrowed. No seed mix applied. Cattle trampled wetland in Robinson Coulee.
Min Elev. (m): 869 ***Max Elev. (m):*** 869
Other Comments: UTM's given as a range therefore include UTM's: 551900.21E, 5432848.19 N; 551910.5E to 551935.67E & 5432906.17N to 5433044.76. And 551773.44E,5432146.22N. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551890 5432792 Milk River Lake LS # 64, Km 426 & 426.9, LLD NW 12-24-1-3-4 & NW 5-13-1-3-4 - LS#64;km: 426,426.9;LDD:SW 24 1-3-4,NW 13 1-3-4. 24 3974
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Boisduvalia glabella smooth boisduvalia SRank: S2
+++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 008 ***Survey Date:*** 1962-07-16
Last Observed: 1962-07-16 ***First Observed:*** 1962-07-16 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Cressday; ~2km SW of; Hwy 48; along.
General Description: Margin of dried-out slough. Chromosome number of one plant of this population n=15II
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Best Source of Info:*** S62MOSACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S62MOSACONCA02 Mosquin, T. & L. Mosquin AC none 1962-07-16 n of one plant of this population = 15II
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 554500 5452950 Cressday 42 4219
Boisduvalia glabella smooth boisduvalia SRank: S2
+++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 009 ***Survey Date:*** 1953-08-15
Last Observed: 1953-08-15 ***First Observed:*** 1953-08-15 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Vale, 5.5 km W of.
General Description: dry slough bottom
Min Elev. (m): 777 ***Max Elev. (m):*** 777 ***Best Source of Info:*** S53MOSUAABCA42
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53MOSUAABCA42 Moss, E.H. UA 12942 1953-08-15 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L01 12 537400 5563600 Vale 7 4471
Boisduvalia glabella smooth boisduvalia SRank: S2
++++++++++++++++++++++++

Element Code: PDONA01030 ***Occurrence Code #:*** 010 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Lost River and USA border, 5 km NE of.
General Description: clay solonetzic blow-outs
Min Elev. (m): 884 ***Max Elev. (m):*** 884 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 546050 5428050 Lost River 44 4545
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Boisduvalia glabella smooth boisduvalia SRank: S2

Bromus latiglumis Canada brome

Natural Region: Northern Fescue Grassland
Habitat: Woodland
Phenology: headed out and most visible in August-September
Specific Search Strategies (if any): perhaps a species more of the Central and Foothills Parkland Natural Regions; lightly or ungrazed woodlands; also in low shrub/lush grassland

Element Occurrences:

Element Code: PMPOA151M0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1992-08-12
Last Observed: 1992-08-12 ***First Observed:*** 1992-08-12 ***Precision Code:*** M
Directions: Kneehill M.D., Trochu, 14km NE of; Dry Island Buffalo Jump Provincial Park
General Description: aspen parkland, Red Deer River valley basin, dry meadow of Agropyron-Elaeagnus-Symphoricarpos-Poa-Stipa-Gaillardia; SW29
Tp34-R21-W4; 51N/112 57W; Map 82P/15 ca. 365057550
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S92MACPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92MACPMABCA01 Macdonald, I.D. & M. Getty PM B93.1.53 1992-08-12 Y panicles (no leaves or roots)
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297
Bromus latiglumis Canada brome SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA151M0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1997-09-08
Last Observed: 1997-09-08 ***First Observed:*** 1997-09-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Lees Lake, 2 km S of; underground gas pipeline, 250 m W of.
General Description: Aspen with occasional Balsam poplar-saskatoon berry-snowberry-prickly rose - Corn stol-Act rub-Phle pra-Elym can- Cala can-Gali bore- Trise cern- Meli sub
Min Elev. (m): 1372 ***Max Elev. (m):*** 1372
Other Comments: 11 (13) on RoW and access road, 3 (7) west of RoW, specimen collected ***Best Source of Info:*** U97AXY02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 699500 5488900 Lees Lake ESD 4B LSD Easting 13-32-6-2 W5M 32 3902
Source Code Author Publisher Year Title
U97AXY02ABCA Dana Bush Axys Environmental Consulting Ltd. 1997 Environmental Alignment Sheet- Burmis pipeline
Date Source Abstract Code Observer Occurrence Data
1997-08-07 U97AXY02ABCA 20 culms, 14 in fruit
Bromus latiglumis Canada brome SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA151M0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1944-08-02
Last Observed: 1944-08-02 ***First Observed:*** 1944-08-02 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Groat Ravine; near creek on side of; bridge; a few rods above.
Min Elev. (m): 648 ***Max Elev. (m):*** 648 ***Best Source of Info:*** S44TURUAABCA19
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44TURACONCA06 Turner, G.H. AC 55135 1944-08-02 Y
S44TURUAABCA19 Turner, G. H. UA 34418 1944-08-02 ?Y spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 331700 5935550 Edmonton 13 3356
Bromus latiglumis Canada brome SRank: S1

Calylophus serrulatus shrubby evening-primrose

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: mid-June to late July
Specific Search Strategies (if any): difficult to pin down; occurs on a wide range of sites and probably should be more common that records indicate; occurs on eroding sandy or sandy-gravelly soils on level to rolling uplands and valley slopes. Quite visible when in flower; may be difficult to find at other seasons.

Element Occurrences:

Element Code: PDONA02040 ***Occurrence Code #:*** 001 ***Survey Date:*** 1982-07-29
Last Observed: 1982-07-29 ***First Observed:*** 1982-07-29 ***Precision Code:*** M
Directions: Parkland
General Description: Dry S slope
Min Elev. (m): 708 ***Max Elev. (m):*** 708 ***Aspect:*** S ***Best Source of Info:*** S82ALLPPABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82ALLPPABCA07 Allen, L. & M. Jackson PP 708 1982-07-29
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 477650 5818550 Hardisty 2 315
Date Source Abstract Code Observer Occurrence Data
Rare-sandy prairie/dunes
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1977-00-00 ***Precision Code:*** M
Directions: Canadian Forces Base Suffield National Wildlife Area
General Description: from subxeric to xeric sites of dry prairie grasslands on slopes of rolling sandy ground moraine and sand hill landforms
Min Elev. (m): 678 ***Max Elev. (m):*** 678
Other Comments: Jaques (1977) also reported it here; at northwestern limit of its western range
Management Comments: threatened in this region by cultivation ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 540500 5607000 Middle Sand Hills UTM WM ca 540500 / 5607000 5 219
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 003 ***Survey Date:*** 1978-06-15
Last Observed: 1978-06-15 ***First Observed:*** 1978-06-15 ***Precision Code:*** M
Directions: Fabyan, about 2 mi. N of; Battle River & Hwy. 14, junction.
General Description: Prairie grassland; on exposed slope.
Min Elev. (m): 650 ***Max Elev. (m):*** 650
Other Comments: Det. by K. Tannas; specimen housed at E.S.R.C. herbarium. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D14 12 499900 5860650 Battle River 1 316
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
several sporadically occurring individuals; flowering
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 004 ***Survey Date:*** 1997-06-24
Last Observed: 1997-06-24 ***First Observed:*** 1997-06-24 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Lethbridge, 2 km NW of; Hardieville, 1.5 km WSW of; Alexander Wilderness Park.
General Description: on dry NW slope; sandy soil; Stipa spp., Calamovilfa longifolia; Carex filofolia, Plantago patagonica, Astragalus spp.
Min Elev. (m): 840 ***Max Elev. (m):*** 840 ***Aspect:*** NW ***Best Source of Info:*** U97ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 367050 5510750 Hardieville 3TM 83174.38 55111654.94 22 3793
Source Code Author Publisher Year Title
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-06-25 U97ERN01ABCA Reg Ernst 1 vegetative, 4 flowering
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 005 ***Survey Date:*** 1986-06-20
Last Observed: 1986-06-20 ***First Observed:*** 1981-07-12 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Mud Lake, 1 km W of.
General Description: Fescue grassland. Open prairie.
Min Elev. (m): 975 ***Max Elev. (m):*** 980 ***Best Source of Info:*** S86LAGALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S81MCIPMABCA09 McIsaac, P. PM B86.37.23 1981-07-12 Y
S82WILALABCA01 Willms, W. & R. Gschaid AL 5257 1982-07-14 Y blooming
S86LAGALABCA01 La Groix, Robin AL none 1986-06-20 Y flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H13 12 315000 5514250 Mud Lake 10 1390
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cabin Lake (the lake), 2 km SW of; Indian Creek, 100 m E of.
Min Elev. (m): 716 ***Max Elev. (m):*** 716
Other Comments: Twp/Rg. 1/4 section coord (SW) does not match with LSD (14). - Mapped with correct LSD. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M03 12 485500 5652100 Indian Creek LS # 28; Km 183; LLD SW 4 24-9-4 3 4143
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 007 ***Survey Date:*** 1928-07-30
Last Observed: 1928-07-30 ***First Observed:*** 1928-07-30 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Fort Macleod.
General Description: old stubble field
Min Elev. (m): 945 ***Max Elev. (m):*** 945 ***Best Source of Info:*** S28DIXUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S28DIXUAABCA03 Dixon, R.H. UA 13173 1928-07-30 Y flowers; fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 327500 5510300 Fort Macleod 8 4444
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 008 ***Survey Date:*** 1971-06-15
Last Observed: 1971-06-15 ***First Observed:*** 1971-06-15 ***Actual Mapping Precision (m):*** 900 ***Precision Code:*** M
Directions: Hwy 41 Crossing on South Saskatchewan River, 1.5 km NW of.
General Description: dry, S-facing slope; in patch of Juniperus horizontalis
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Aspect:*** S ***Best Source of Info:*** S71SCOUAABCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71SCOUAABCA36 Scott, P.J. UA 38689 1971-06-15 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 564850 5621250 South Saskatchewan River 37 4492
Calylophus serrulatus shrubby evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 009 ***Survey Date:*** 1976-07-12
Last Observed: 1976-07-12 ***First Observed:*** 1976-07-12 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Empress, 5 km N of; Hamilton Hill.
General Description: open grass
Min Elev. (m): 632 ***Max Elev. (m):*** 632 ***Best Source of Info:*** S76KLAUAABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA10 Klar, Andrew UA 80781 1976-07-12 Y flowers; fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 569000 5650000 Hamilton Hill 51 00/110 01 17 4500
Calylophus serrulatus shrubby evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 010 ***Survey Date:*** 1976-07-18
Last Observed: 1976-07-18 ***First Observed:*** 1976-07-18 ***Actual Mapping Precision (m):*** 1800 ***Precision Code:*** M
Directions: Lost River and Hwy 502 crossing.
General Description: silt deposit in dried-up floodplain
Min Elev. (m): 915 ***Max Elev. (m):*** 915 ***Best Source of Info:*** S76KLAUAABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA12 Klar, Andrew UA 80782 1976-07-18 Y buds, flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 531623 5438309 Lost River 49 06N/110 34W 22 33
Calylophus serrulatus shrubby evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 011 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, slope of; USA border, N of.
General Description: sandy soil
Min Elev. (m): 869 ***Max Elev. (m):*** 884 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 541350 5427775 Lost River 45 4546
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Calylophus serrulatus shrubby evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 012 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 8 km N of; Lost River Valley, E slope of.
General Description: stabilized dunes
Min Elev. (m): 861 ***Max Elev. (m):*** 899 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Calylophus serrulatus shrubby evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA02040 ***Occurrence Code #:*** 013 ***Survey Date:*** 1999-08-17
Last Observed: 1999-08-17 ***First Observed:*** 1999-08-17 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Highway 555, 16.5 km N of; Red Deer River, 12 km N of; Alkali Creek, 500 m E of.
General Description: steep slope of a valley terrace in cobbly/sandy clay soils in a prairie shrubland; Rosa woo/Stip com-Koel mac-Ruhl cus; Arte fri, Sali mis, Gote sar; xeric; 20 deg. slope
Min Elev. (m): 709 ***Max Elev. (m):*** 709 ***Aspect:*** NW
Management Comments: Stake boundaries of areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L15 12 530525 5644500 Highway 555 04-18-23-04-W4M, Lat 50 57.201' Lon 110 33.818' 5 5329
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering SystemPipeline right of way
Date Source Abstract Code Observer Occurrence Data
U99GOL02ABCA 50% flowering, 50% fruiting
1999-08-17 U99GOL01ABCA 33 individuals sighted occurring on and off the ROW up to 21 m away
Calylophus serrulatus shrubby evening-primrose SRank: S2

Camissonia andina upland evening-primrose

Natural Region: Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: late May-early June
Specific Search Strategies (if any): microtopography; around rims and in bottoms of seasonally moist slight depressions, tiny features within sand plain grassland

Element Occurrences:

Element Code: PDONA03010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1999-06-08
Last Observed: 1999-06-08 ***First Observed:*** 1989-07-02 ***Precision Code:*** S
Occurrence Type: annual
Directions: Milk River Natural Area
General Description: Somewhat exposed sandy soil in moist swales on S-facing hillside, not in alkali flats or lowlands.
Min Elev. (m): 985 ***Max Elev. (m):*** 985 ***Best Source of Info:*** S89WALPPABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA11 Wallis, C. PP 52 1989-07-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 517473 5431384 Milk River Natural Area LSD 12 12 23
Source Code Author Publisher Year Title
F97GOU01ABCA Gould, J. 1997 Field notes
Date Source Abstract Code Observer Occurrence Data
Habitat extremely scarce; approx. 100 plants 1999-06-08 J. Gould, D. Vujnovic 106 plants noted
Camissonia andina upland evening-primrose SRank: S1
+++++++++++++++++++++++

Element Code: PDONA03010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1985-05-28
Last Observed: 1985-05-28 ***First Observed:*** 1985-05-28 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Onefour, 8 km S of; Lost River, 1.5 km NE of.
General Description: seasonally moist slight depression in grassland
Min Elev. (m): 906 ***Max Elev. (m):*** 906 ***Best Source of Info:*** S85WALUAABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA11 Wallis, C. UA 098375 1985-05-28 Y [rare]; flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538625 5432975 Lost River 52 4553
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Camissonia andina upland evening-primrose SRank: S1

Camissonia breviflora **taraxia**

Natural Region: Northern Fescue Grassland, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers in July
Specific Search Strategies (if any): edge of ephemeral sandy alkali wetlands; may be worth checking out ungrazed ephemeral wetlands within cultivation. Not every dot in Moss (1983) can be attributed to collections noted in the ANHIC data file.

Element Occurrences:

Element Code: PDONA03060 ***Occurrence Code #:*** 001 ***Survey Date:*** 1946-07-27
Last Observed: 1946-07-27 ***First Observed:*** 1946-07-27 ***Precision Code:*** G
Directions: Etzikom, near
General Description: dry slough bottom
Min Elev. (m): 876 ***Max Elev. (m):*** 876
Other Comments: Det. by E.H Moss ***Best Source of Info:*** S46MOSUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S46MOSUAABCA05 Moss, E.H. UA 13143 1946-07-27 [small yellow flowers; fruit]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E06 12 492700 5480225 Etzikom 2 80
Camissonia breviflora taraxia SRank: S1

Carex hystericina porcupine sedge

Natural Region: Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in July
Specific Search Strategies (if any): lightly or ungrazed springs in sandy coulee woodlands; also spring-fed beaver ponds on valley slopes in sandy terrain

Element Occurrences:

Element Code: PMCYP036D0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1974-09-07
Last Observed: 1974-09-07 ***First Observed:*** 1974-09-07 ***Precision Code:*** M
General Description: Wet soil in open roadside ditch.
Min Elev. (m): 730 ***Max Elev. (m):*** 730 ***Best Source of Info:*** S74PEGPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74PEGPMABCA02 Pegg, G.R. PM B88.1.1788 1974-09-07 Only one robust plant seen here to 70 cm tall, strongly caespitose, dispersing fruits.
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G10 11 658400 5938250 Fallis Lat/Long: 53 35'/ 114 36' 13 3137
Carex hystericina porcupine sedge SRank: S1
+++++++++++++++++++++++

Element Code: PMCYP036D0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1974-09-07
Last Observed: 1974-09-07 ***First Observed:*** 1974-09-07 ***Precision Code:*** S
Directions: Along railroad tracks.
Min Elev. (m): 730 ***Max Elev. (m):*** 730 ***Best Source of Info:*** S74PEGPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74PEGPMABCA03 Pegg, G.R. PM B88.1.1787 1974-09-07 1 plant; dispersing fruits.
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G09 11 667300 5936950 Wabamun Lat/Long: 53 34'/ 114 29' 4 3115
Carex hystericina porcupine sedge SRank: S1
+++++++++++++++++++++++

Element Code: PMCYP036D0 ***Occurrence Code #:*** 003 ***Survey Date:*** 2000-09-08
Last Observed: 2000-09-08 ***First Observed:*** 2000-08-07 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Crooked Lake, E side of channel between N & S sections of lake
General Description: wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; Carex bebbii/Juncus bufonius/ Calamagrostis stricta/ Equisetum palustre/ Salix saplings
Min Elev. (m): 621 ***Max Elev. (m):*** 621
Other Comments: 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygric - subhygric ***Best Source of Info:*** U00GRI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83I13 12 337175 6089100 Crooked Lake Twp 68 Rge 24 W4M Sec 35 LSD 1 6 6324
Source Code Author Publisher Year Title
U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms
Carex hystericina porcupine sedge SRank: S1
+++++++++++++++++++++++

Element Code: PMCYP036D0 ***Occurrence Code #:*** 004 ***Survey Date:*** 2000-09-08
Last Observed: 2000-09-08 ***First Observed:*** 2000-08-07 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Crooked Lake, SW side of; on Creek Cove Point
General Description: wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; Carex bebbii/Juncus bufonius/ Calamagrostis stricta/ Equisetum palustre/ Salix saplings
Min Elev. (m): 621 ***Max Elev. (m):*** 621
Other Comments: 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygric - subhygric ***Best Source of Info:*** U00GRI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83I13 12 337475 6086200 Crooked Lake Twp 68 Rge 24 W4M Sec 24 LSD 5 7 6325
Source Code Author Publisher Year Title
U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms
Carex hystericina porcupine sedge SRank: S1

Element Code: PMCYP036D0 ***Occurrence Code #:*** 005 ***Survey Date:*** 2000-09-08
Last Observed: *2000-09-08* ***First Observed:*** *2000-08-07* ***Actual Mapping Precision (m):*** *250* ***Precision Code:*** *S*
Directions: Crooked Lake
General Description: wet, sandy, wind-exposed lake shore; stable comm, not developed (early successional plants on sand exposed by receding water level the previous season; Carex bebbii/Juncus bufonius/ Calamagrostis stricta/ Equisetum palustre/ Salix saplings
Min Elev. (m): 621 ***Max Elev. (m):*** 621
Other Comments: 2 specimens collected (UA Herbarium); ~20 individuals; Fruiting (shedding ripe seed in Sept); ite should be protected by approval of Special Places proposal; slides of habitat & diagnostic feature; site hygric - subhygric ***Best Source of Info:*** U00GRI01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83I13 12 337175 6089100 Crooked Lake Twp 68 Rge 24 W4M Sec 35 LSD 1 6 6324
83I13 12 337475 6086200 Crooked Lake Twp 68 Rge 24 W4M Sec 24 LSD 5 7 6324

Source Code Author Publisher Year Title
U00GRI01ABCA Griffiths, Graham C.D. & Deirdre E. Griffiths 2000 Rare Native Plant Survey Forms

Carex hystericina porcupine sedge SRank: S1

Carex nebrascensis Nebraska sedge

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in July
Specific Search Strategies (if any): visible and distinctive into September and October; lightly or ungrazed spring-fed creeks and sloughs where there is a semi-permanent water supply

Element Occurrences:

Element Code: PMCYP03940 ***Occurrence Code #:*** 001 ***Survey Date:*** 1988-07-08
Last Observed: 1988-07-08 ***First Observed:*** 1988-07-08 ***Precision Code:*** S
Directions: Warner; Twin River Valley Natural Area.
General Description: In and beside stream, in bottom of coulee, humus, isolation and cold air damage, floods may be expected, subhygric, cool soil temp, mod. well drainage, mod perviousness.
Min Elev. (m): 1105 ***Max Elev. (m):*** 1105
Slope: 1.00 ***Aspect:*** S ***Best Source of Info:*** F88WEE01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88WEEPPABCA02 Weerstra, A. PP 003560 1988-07-08 Common
S88WEEPPABCA07 Weerstra, A. PP 587 1988-07-08
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 402250 5445500 Twin River Valley Natural Area Plot 26 3 913
Source Code Author Publisher Year Title
F88WEE01ABCA Weerstra, A. Twin River Field Notes
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 002 ***Survey Date:*** 1988-05-28
Last Observed: 1988-05-28 ***First Observed:*** 1988-05-28 ***Precision Code:*** M
Directions: Milk River, N side of; Ross Ranch.
General Description: creek bank communities; imperfectly drained.
Min Elev. (m): 876 ***Max Elev. (m):*** 920 ***Best Source of Info:*** S88SCOCFABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88SCOCFABCA02 Scotter, G.W. CF 880791 1988-05-28 developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 481823 5445785 Ross Ranch 2 37
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 003 ***Survey Date:*** 1993-09-25
Last Observed: 1993-09-25 ***First Observed:*** 1993-09-25 ***Precision Code:*** S
Directions: Aden, 16 km W of; Hwy 500, S of; Macdonald Creek
General Description: Mixed Grass Ecoregion: shallow valley in rolling prairie, shore of stream forming extensive pure colony with Typha latifolia; Site #16-Map46
Min Elev. (m): 1058 ***Max Elev. (m):*** 1058 ***Size of Occurrence:*** 0.31
Other Comments: Ref. Macdonald, I.D. & B. Smith, 1994. COSEWIC report on Nebraska sedge - Carex nebrascensis C. Dewey
Best Source of Info: S93MACUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93MACUAABCA06 Macdonald, Ian D. UA 100337 1993-09-25 Y inflorescences only; plants 110 cm tall, profusely fruiting; well-developed fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 463074 5430359 Macdonald Creek 12 60
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 **Occurrence Code #:** 004 **Survey Date:** 1993-07-17
Last Observed: 1993-07-17 **First Observed:** 1993-07-17 **Precision Code:** S
Directions: Aden, 12 km W of; Hwy 500, N of; Black Creek Coulee, Southern tributary of
General Description: mixed grass ecoregion: incised valley basin stream edge saturated marsh od Carex nebrascensis, Mentha arvensis, Epilobium palustre, Calamagrostis stricta; Site #17-Map4C
Min Elev. (m): 998 **Max Elev. (m):** 1021 **Size of Occurrence:** 0.04 **Best Source of Info:** S93MACUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93MACUAABCA05 Macdonald, Ian D. UA 100336 1993-07-17 Y Nebraska sedge along 0.5 km of this valley; well-developed fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 465524 5430909 Black Coulee 5 40
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 **Occurrence Code #:** 005 **Survey Date:** 1993-07-08
Last Observed: 1993-07-08 **First Observed:** 1993-07-08 **Precision Code:** S
Directions: AB; Warner County; Hwy 500, S of Boundary Road extension to; Coutts,18 km E of
General Description: Mixed Grass Ecoregion: valley basin alternate flow channel very wet marsh of Carex nebrascensis, Juncus balticus, Sonchus arvensis
Min Elev. (m): 1014 **Max Elev. (m):** 1014 **Size of Occurrence:** 0.26
Other Comments: same ref: COSEWIC Nebraska sedge Site 3 **Best Source of Info:** S93MACUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93MACUAABCA04 Macdonald, Ian D. UA 100335 1993-07-08 Y developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 447948 5428559 Police Creek 49 00/111 42 72E/4 VK448154280 13 61
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 **Occurrence Code #:** 006 **Survey Date:** 1993-06-05
Last Observed: 1993-06-25 **First Observed:** 1993-05-26 **Precision Code:** S
Directions: Aden, 19 km W of; USA border, N of; Deer Creek
General Description: mixed grass ecoregion: incised valley floodplain stream edge, wet fringe meadow under Populus balsamifera subsp. trichocarpa. Site 11-Map 4b
Min Elev. (m): 1170 **Max Elev. (m):** 1197 **Best Source of Info:** S93MACUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93MACUAABCA01 Macdonald, Ian D. UA 100332 1993-05-26 Y local concentrations, bases immersed in alluvial spring flood silts; spikelets in anthesis
S93MACUAABCA03 Macdonald, Ian D. UA 100334 1993-06-05 Y flowers, male and female in anthesis or post-anthesis
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 458624 5427259 Deer Creek 14 62
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 **Occurrence Code #:** 007 **Survey Date:** 1993-06-03
Last Observed: 1993-06-03 **First Observed:** 1993-06-03 **Precision Code:** S
Directions: Coutts,16 km E of; Boundary Road, S of ; extension to Hwy 500
General Description: Mixed grass ecoregion: broad shallow valley basin alkaline seepage wet fringe of marsh of Typha latifolia with Juncus balticus, Carex lanuginosa, Triglonchin martima, Equisetum arvense; Site 1 - Map 4a
Min Elev. (m): 1005 **Max Elev. (m):** 1015 **Size of Occurrence:** 0.09 **Best Source of Info:** S93MACUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93MACUAABCA02 Macdonald, Ian D. UA 100333 1993-06-03 Y spikelets - late anthesis
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 446398 5428009 Police Creek 49 00N/111 44W 15 63
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 008 ***Survey Date:*** 1992-07-23
Last Observed: 1992-07-23 ***First Observed:*** 1992-07-23 ***Precision Code:*** S
Directions: West Butte, NW of; Sweetgrass Hills, coulee off N slope of
General Description: Mixed grassland; dry rolling prairie - coulee basin; moist seepage meadow of Carex-Epilobium-Eleocharis; Site #8 - Map 4b
Min Elev. (m): 1127 ***Max Elev. (m):*** 1173 ***Size of Occurrence:*** 0.03 ***Best Source of Info:*** S92MACUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92MACUAABCA01 Macdonald, Ian D. UA none 1992-07-23 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 456149 5427983 Ramsay Coulee 49 00N/111 36W 16 64
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 009 ***Survey Date:*** 1993-07-08
Last Observed: 1993-07-08 ***First Observed:*** 1993-06-03 ***Precision Code:*** S
Directions: Hwy 500, S of; Police Creek
General Description: gently rolling prairie terrain, alkali seepage
Min Elev. (m): 1003 ***Max Elev. (m):*** 1021 ***Size of Occurrence:*** 0.12
Other Comments: Site 2 - Map 4a
Management Comments: site adjacent to close grazing management, but not threatened ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 446773 5428784 Police Creek 17 65
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 010 ***Survey Date:*** 1991-07-22
Last Observed: 1991-07-22 ***First Observed:*** 1991-07-22 ***Precision Code:*** S
Directions: Writing-on-Stone P.P., SW of; Van Cleeve Coulee, S of
General Description: coulee basin meandering stream channel landform
Min Elev. (m): 967 ***Max Elev. (m):*** 967
Other Comments: Site 4 - Map 4a
Management Comments: Its location relative to the other nearby sites would indicate hope for the discovery of further sites along the Milk Ri ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 447723 5434233 Van Cleeve Coulee 18 66
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 011 ***Survey Date:*** 1993-07-15
Last Observed: 1993-07-15 ***First Observed:*** 1993-07-15 ***Precision Code:*** S
Directions: US border, N of; Police Creek
General Description: deeply incised coulee basin landform
Min Elev. (m): 1052 ***Max Elev. (m):*** 1052
Other Comments: Site 5 - Map 4a
Management Comments: Site is somewhat isolated from adjacent grazing and is not threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 451424 5427784 Police Creek 19 67
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 012 ***Survey Date:*** 1993-05-25
Last Observed: 1993-05-25 ***First Observed:*** 1988-00-00 ***Precision Code:*** S
Directions: US border, just N of; Police Creek
General Description: deeply incised and well developed coulee of the sloping sweetgrass north slopes landform
Min Elev. (m): 1135 ***Max Elev. (m):*** 1135
Other Comments: 500-1000 plants; Site 6 - Map4b
Management Comments: Site is somewhat isolated from adjacent close grazing and is not threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454599 5427134 Police Creek 20 68
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 013 ***Survey Date:*** 1993-09-25
Last Observed: 1993-09-25 ***First Observed:*** 1992-10-01 ***Precision Code:*** S
Directions: US border, N of; Police Creek, tributary, E
General Description: incised valley and the coulee landforms; extensive alkali seepage
Min Elev. (m): 1103 ***Max Elev. (m):*** 1143 ***Size of Occurrence:*** 0.13
Other Comments: Site 7 - Map 4b
Management Comments: Site is adjacent to moderate to locally intensive close grazing and local ranch buildings, but overall not threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 455074 5428083 Police Creek 21 69
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 014 ***Survey Date:*** 1993-07-15
Last Observed: 1993-07-15 ***First Observed:*** 1993-07-15 ***Precision Code:*** S
Directions: Boundary Road, N of; Ramsay Coulee, SW of
General Description: On shore of a reservoir and presents poor examples of the flowing/standing water and stream/pond backshore communities.
Min Elev. (m): 1135 ***Max Elev. (m):*** 1135 ***Size of Occurrence:*** 0.01
Other Comments: Site 9 - Map 4b
Management Comments: Site is not threatened from grazing and reservoir management. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 455824 5428408 Ramsay Coulee 22 70
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 015 ***Survey Date:*** 1993-09-25
Last Observed: 1993-09-25 ***First Observed:*** 1993-06-05 ***Precision Code:*** S
Directions: Boundary Road; Ramsay Coulee, just SW of
General Description: incised valley basin landforms, alkali seepage
Min Elev. (m): 1112 ***Max Elev. (m):*** 1204 ***Size of Occurrence:*** 0.25
Other Comments: Site 10 - Map 4b
Management Comments: Site under sensitive, low to moderate intensity grazing management and the owners appear to be concerned to the well-be ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 457074 5428683 Ramsay Coulee 23 71
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 016 ***Survey Date:*** 1993-07-09
Last Observed: 1993-07-09 ***First Observed:*** 1993-07-09 ***Precision Code:*** S
Directions: Ramsay Coulee Creek
General Description: broadly rolling prairies; alkali seepage
Min Elev. (m): 1036 ***Max Elev. (m):*** 1051 ***Size of Occurrence:*** 0.01
Other Comments: Site 12 - Map 4b
Management Comments: Site has moderate close grazing impact. Its stands of sedge are poorly developed and widely-spaced. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 459949 5431683 Ramsay Coulee Creek 24 72
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 017 ***Survey Date:*** 1993-07-17
Last Observed: 1993-07-17 ***First Observed:*** 1993-07-17 ***Precision Code:*** S
Directions: Dickinson Creek
General Description: shallow and broad valley in the rolling prairies; alkali seepage
Min Elev. (m): 1074 ***Max Elev. (m):*** 1074 ***Size of Occurrence:*** 0.01
Other Comments: Site 13 - Map 4b
Management Comments: Site adjacent to cropland and intensive grazing management. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 461149 5430134 Dickinson Creek 25 73
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 018 ***Survey Date:*** 1993-09-25
Last Observed: 1993-09-25 ***First Observed:*** 1993-09-25 ***Precision Code:*** S
Directions: Deer Creek
General Description: well-developed coulee basin
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Size of Occurrence:*** 0.01
Other Comments: Site 14 - Map 4b
Management Comments: Site is threatened due to intense use by cattle for shelter and watering. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 462199 5433934 Deer Creek 26 74
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 019 ***Survey Date:*** 1992-10-02
Last Observed: 1992-10-02 ***First Observed:*** 1992-06-23 ***Precision Code:*** S
Directions: Macdonald Creek
General Description: broadly rolling prairie landform
Min Elev. (m): 1105 ***Max Elev. (m):*** 1105
Other Comments: Site 15 - Map 4b ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 462324 5428934 Macdonald Creek 27 75
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 020 ***Survey Date:*** 1993-09-24
Last Observed: 1993-09-24 ***First Observed:*** 1993-09-24 ***Precision Code:*** S
Directions: Miners Coulee
General Description: stream edge of coulee basin with a permanent stream channel
Min Elev. (m): 991 ***Max Elev. (m):*** 991
Other Comments: Site 18 - Map 4c
Management Comments: Site is lightly grazed; not threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 471699 5431135 Miners Coulee 6 41
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 021 ***Survey Date:*** 1993-09-24
Last Observed: 1993-09-24 ***First Observed:*** 1993-09-24 ***Precision Code:*** S
Directions: Aden, NE of
General Description: well-developed coulee with a permanent stream and well-developed basin landform features; alkali seepage
Min Elev. (m): 1021 ***Max Elev. (m):*** 1030 ***Size of Occurrence:*** 0.01
Other Comments: Site 20 - Map 4d
Management Comments: Moderate mixed grazing management in the site, but sedge stands are not threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 478998 5430685 Aden 7 42
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 022 ***Survey Date:*** 1993-09-24
Last Observed: 1993-09-24 ***First Observed:*** 1993-09-24 ***Precision Code:*** S
Directions: Aden, NE of; Breed Creek
General Description: well-developed coulee basin along sides of permanent stream
Min Elev. (m): 1021 ***Max Elev. (m):*** 1030 ***Size of Occurrence:*** 0.01
Other Comments: Site 21 - Map 4d
Management Comments: Adjacent floodplain has been used for cattle for 50 yrs+, but the stands do not appear to be threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 479923 5433785 Breed Creek 8 43
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 023 ***Survey Date:*** 1993-09-23
Last Observed: 1993-09-23 ***First Observed:*** 1993-06-04 ***Precision Code:*** S
Directions: US border N of; Bear Creek
General Description: well-developed incised valley basin in the drier portions; alkali seepage
Min Elev. (m): 1067 ***Max Elev. (m):*** 1067 ***Size of Occurrence:*** 0.01
Other Comments: Site 22 - Map 4e
Management Comments: Light to moderate grazing, but stands are not immediately threatened. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 486248 5429185 Bear Creek 9 44
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 024 ***Survey Date:*** 1993-09-23
Last Observed: 1993-09-23 ***First Observed:*** 1993-09-23 ***Precision Code:*** S
Directions: US border, N of; Bear Creek, E tributary
General Description: well-developed incised valley basin in the drier portions; alkali seepage
Min Elev. (m): 1074 ***Max Elev. (m):*** 1120 ***Size of Occurrence:*** 0.03
Other Comments: Site 23 - Map 4e
Management Comments: Close grazing is permitted in the area - but stands are not threatened ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 487548 5428510 Bear Creek 10 45
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 025 ***Survey Date:*** 1992-06-24
Last Observed: 1992-06-24 ***First Observed:*** 1992-06-24 ***Precision Code:*** S
Directions: Bear Creek
General Description: relatively dry basin of a broad incised valley with moderate alkali seepage
Min Elev. (m): 1050 ***Max Elev. (m):*** 1050
Other Comments: Site 24 - Map 4e
Management Comments: Close grazing observed in area - but threat status could not be determined. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 487173 5430535 Bear Creek 11 46
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03940 ***Occurrence Code #:*** 026 ***Survey Date:*** 1988-08-08
Last Observed: 1988-08-08 ***First Observed:*** 1988-08-08 ***Precision Code:*** S
Directions: North Milk River
General Description: probable habitats included flowing/standing water and stream/pond backshore communities
Min Elev. (m): 1143 ***Max Elev. (m):*** 1143
Other Comments: Site 26 - Map 4g
Management Comments: No info available whether current close grazing management may threaten site. ***Best Source of Info:*** U95MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 400725 5445800 North Milk River 7 917
Source Code Author Publisher Year Title
U95MAC01ABCA Macdonald Ian D. & Bonnie Smith COSEWIC 1995 Status Report on the Nebrasca Sedge Carex nebrascensis in Canada
Carex nebrascensis Nebraska sedge SRank: S2

Carex retrorsa turned sedge

Natural Region: Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in July
Specific Search Strategies (if any): lightly or ungrazed springs in sandy coulee woodlands in the grassland region; a woodland species of N. Alberta; may occur in Northern Fescue Grassland in ungrazed or lightly grazed densely vegetated shallow wetlands, e.g. Hand Hills ER

Element Occurrences:

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1977-07-20
Last Observed: 1977-07-20 ***First Observed:*** 1977-07-20 ***Precision Code:*** M
Directions: Lac La Biche, 36 mi. ESE of; Wolf Lake, 2 mi. W of; Loon Lake.
Min Elev. (m): 615 ***Max Elev. (m):*** 615
Other Comments: Rev. by J.G. Packer, 1978. ***Best Source of Info:*** S77BIRUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BIRUCABCA01 Bird, C.D. & K.E. Hinkes UC 05027 1977-07-20 [fruit]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73L11 12 496900 6063450 Wolf River Study Area 2; 54 43/111 03. 5 349
Carex retrorsa turned sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1976-08-04
Last Observed: 1976-08-04 ***First Observed:*** 1976-08-04 ***Precision Code:*** S
Directions: North Saskatchewan River, on; Elk Point Campground.
General Description: On low open ground along the river.
Min Elev. (m): 533 ***Max Elev. (m):*** 533 ***Best Source of Info:*** S76WIEUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76WIEUCABCA01 Wiebe, K. UC 05026 1976-08-04 [fruit]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E15 12 506600 5968050 Elk Point Campground 3 333
Carex retrorsa turned sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1952-07-20
Last Observed: 1952-07-20 ***First Observed:*** 1952-07-20 ***Precision Code:*** S
Directions: Ma-Me-O Beach, just W of; Indian Reserve.
General Description: On low, wet, sandy open ground.
Min Elev. (m): 846 ***Max Elev. (m):*** 846
Other Comments: U of A duplicate #36284 ***Best Source of Info:*** S52TURUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52TURACONCA01 Turner, George H. AC 368802 1952-07-20
S52TURNMONCA01 Turner, G.H. NM 220142 1952-07-22
S52TURUAABCA02 Turner, George H. UA 36284 1952-07-20 Y mature spikelets
S52TURUCABCA01 Turner, G.H. UC 05029 1952-07-20 [fruit]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A13 12 300950 5873200 Ma-Me-O Beach 4 2326
Carex retrorsa turned sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1979-07-30
Last Observed: 1979-07-30 ***First Observed:*** 1979-07-30 ***Precision Code:*** S
Directions: Fort McMurray, approx. 34 mi. N of; Town Fort MacKay, just S of the; MacKay River Bridge, on the W side of the.
General Description: In shallow backwater.
Min Elev. (m): 240 ***Max Elev. (m):*** 240
Other Comments: Det. by John Corbin. ***Best Source of Info:*** S79CORUCABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79CORUCABCA08 Corbin, J. & P. van Eck UC 42032 1979-07-30 [fruit]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74E04 12 461250 6336100 Fort MacKay 8 415
Carex retrorsa turned sedge SRank: S2
++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1977-08-16
Last Observed: 1977-08-16 ***First Observed:*** 1977-07-19 ***Precision Code:*** S
Directions: Hutton, 1 mile west of
General Description: willow/sedge habitat
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Best Source of Info:*** S77BRAUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA03 Bradley, C. & C. Wallis UA 74723 1977-07-19 Y developing spikelets
S77BRAUAABCA04 Bradley, C. & C. Wallis UA 74710 1977-08-16 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M04 12 432650 5652675 Hutton 2 256
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1989-08-18
Last Observed: 1989-08-18 ***First Observed:*** 1989-08-18 ***Precision Code:*** M
Directions: Kinuso, 11 km SE of, S of Hwy
General Description: roadside ditch; poorly drained
Min Elev. (m): 620 ***Max Elev. (m):*** 620 ***Best Source of Info:*** S89JOHUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89JOHUAABCA01 Johnson, J.D. UA 93936 1989-08-18 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83O06 11 607400 6125700 Kinuso 55 16/115 18 3 3612
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1921-08-05
Last Observed: 1921-08-05 ***First Observed:*** 1921-08-05 ***Precision Code:*** M
Directions: Edmonton; North Clover Bar, Glenbrook Farm
General Description: along stream in wooded ravine on Glenbrook Farm
Min Elev. (m): 648 ***Max Elev. (m):*** 648 ***Best Source of Info:*** S21MCCUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S21MCCACONCA01 McCalla, W.C. AC 149489 1921-08-05
S21MCCUAABCA01 McCalla, W.C. UA 36286 1921-08-05 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 346500 5939575 Clover Bar 24 3341
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1943-08-20
Last Observed: 1945-08-07 ***First Observed:*** 1939-08-19 ***Precision Code:*** M
Directions: 1 mi. NE of Ft Saskatchewan; Ross Creek near its mouth
General Description: shore; clay-silt bank of creek; beside water
Min Elev. (m): 602 ***Max Elev. (m):*** 602 ***Best Source of Info:*** S43MOSUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S39TURACONCA01 Turner, G.H. AC 368801 1939-09-09
S39TURUAABCA02 Turner, G.H. UA 34743 1939-08-19 Y mature spikelets
S41TURUAABCA04 Turner, G.H. UA 36285 1941-07-13 Y [mature perigynia]
S43MCCUAABCA07 McCalla, W.C. UA 36287 1943-08-20 Y mature spikelets
S43MOSUAABCA02 Moss, E.H. & W.C. McCalla UA 3803 1943-08-20 Y mature spikelets
S45TURACONCA01 Turner, G.H. AC 368803 1945-08-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 355200 5955600 Ross Creek 11 3328
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1956-08-17
Last Observed: 1956-08-17 ***First Observed:*** 1944-08-14 ***Precision Code:*** M
Directions: Ft Saskatchewan, 1 mi. S. of
General Description: In 2-3" of water in slough, among tall grasses, in tall Beckmannia.
Min Elev. (m): 625 ***Max Elev. (m):*** 625
Other Comments: Very tall plants with v. long, well-developed spikelets. (Those collected on Sept. 17 with dehiscing spikelets.) (S56TURUAABCA04) ***Best Source of Info:*** S56TURUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44TURUAABCA15 Turner, G.H. UA 34746 1944-08-14 Y mature spikelets
S56TURACONCA03 Turner, G.H. AC 368804 1956-08-17 more than 100 culms in tuft
S56TURUAABCA04 Turner, G.H. UA 34741 1956-08-17 Y "There were more than 100 culms in the clump, the only clump found on this farm." Turner further notes that "a month later 10 more large clumps were found near
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 355900 5952350 Fort Saskatchewan 14 3331
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1945-08-29
Last Observed: 1945-08-29 ***First Observed:*** 1945-08-29 ***Precision Code:*** M
Directions: Fort Saskatchewan, near jail water intake
General Description: river shore
Min Elev. (m): 602 ***Max Elev. (m):*** 602 ***Best Source of Info:*** S45TURUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45TURUAABCA06 Turner, G.H. UA 34745 1945-08-29 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 350675 5951350 Fort Saskatchewan 25 3342
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1952-07-11
Last Observed: 1952-07-11 ***First Observed:*** 1952-07-11 ***Precision Code:*** S
Directions: Ma-Me-O Beach, just W of first bridge beyond, highway to Westrose; in road ditch
General Description: in 6" water
Min Elev. (m): 846 ***Max Elev. (m):*** 846 ***Best Source of Info:*** S52TURUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52TURUAABCA01 Turner, G.H. UA 34744 1952-07-11 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A13 12 299850 5872100 Ma-Me-O Beach 6 2328
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1930-07-31
Last Observed: 1930-07-31 ***First Observed:*** 1930-07-31 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Peace River, Indian Graveyard
General Description: slough margin
Min Elev. (m): 230 ***Max Elev. (m):*** 230 ***Best Source of Info:*** S30RAUUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S30RAUNMONCA01 Hugh M. Raup NM 26592 1930-07-31
S30RAUNMONCA02 Hugh M. Raup NM 26593 1930-07-31
S30RAUUAABCA03 Raup, Hugh M. UA 3806 1930-07-31 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
84I12 12 335000 6511300 Garden Creek ca. 58 42 30/ 113 51 1 3678
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1957-07-03
Last Observed: 1957-07-03 ***First Observed:*** 1957-07-03 ***Precision Code:*** M
Directions: Glenevis
General Description: moist soil
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S57PEGUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S57PEGUAABCA03 Pegg, George UA 3805 1957-07-03 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G15 11 664300 5962300 Glenevis 14 3161
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1945-07-19
Last Observed: 1945-07-19 ***First Observed:*** 1945-07-19 ***Precision Code:*** M
Directions: Seba; near lake shore
General Description: lagoon (pool), now dry
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S45MOSUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45MOSUAABCA02 Moss, E.H. UA 3804 1945-07-19 Y developing spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G10 11 650150 5936450 Seba Beach 17 3140
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1941-07-15
Last Observed: 1941-07-15 ***First Observed:*** 1941-07-15 ***Precision Code:*** M
Directions: Lesser Slave Lake, Widewater
General Description: low place in virgin spruce-poplar woods
Min Elev. (m): 678 ***Max Elev. (m):*** 678 ***Best Source of Info:*** S41MOSUAABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S41MOSNMONCA02 Moss, E.H. NM 25685 1941-07-15
S41MOSUAABCA11 Moss, E.H. UA 3802 1941-07-15 Y mature spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83O06 11 624600 6135750 Widewater 4 3613
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1989-07-27
Last Observed: 1989-07-27 ***First Observed:*** 1989-07-27 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Battle Lake, NE shore of.
Min Elev. (m): 838 ***Max Elev. (m):*** 838 ***Best Source of Info:*** S89HRAPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89HRAPMABCA04 Hrapko, J.O., L.D. Laird & J.H. Doyle PM B89.24.4 1989-07-27 Y well-dev. spikes w reflex. perig; broad leaves
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83B16 11 690000 5872100 Battle Lake 2-46 W5M; 52 58/114 10 1 2410
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1997-00-00
Last Observed: 1997-00-00 ***First Observed:*** 1997-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Braaten, 20 km SE of; forestry trunk rd., on E side of, creek, along,
General Description: swampy woods and we meadows, wet ditch or stream margin,
Min Elev. (m): 716 ***Max Elev. (m):*** 716
Other Comments: Possibly well off right-of-way, along road at stream crossing. Exact location unknown, as identified after field survey complete. ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83L16 11 408600 6069000 Smoky River MLKP 250.5; NW 32-66-3 W6M 2 3849
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Carex retrorsa turned sedge SRank: S2
+++++++++++++++++++++++

Element Code: PMCYP03BJ0 ***Occurrence Code #:*** 021 ***Survey Date:*** 1999-07-29
Last Observed: 1999-07-29 ***First Observed:*** 1999-07-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Mildred Lake (not city), 16.5 km WSW of; Mackay R., 500 m NW of.
General Description: riparian site - some Popu bal and Sali beb, but primarily sedge/grass community immed. on banks. Assoc. spp.: Scir mic, Care ath, Ranu gme, Cicu mac, Glyc gra, Beck syz.
Min Elev. (m): 400 ***Max Elev. (m):*** 400
Slope: 0.00 ***Aspect:*** 0
Other Comments: LSD given (28-93-23-W4M) did not match Utm's
Management Comments: SAGD plant may affect pop. due to water drawdown. ***Best Source of Info:*** U99BUS02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74E04 12 447725 6318800 Mackay River 28-92-12-W4M 14 5465
Source Code Author Publisher Year Title
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-29 U99BUS02ABCA Ruth Johnson approx. 100 individ. pop. extends approx. 50 m immed. along creek drainage, vegetative 6; reproductive 7
Carex retrorsa turned sedge SRank: S2

Carex parryana var parryana Parry's sedge

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in early June
Specific Search Strategies (if any): occurs along edges of springs or on hummocks within spring/seepage areas--seek out small areas of exposed mineral soil; visible through August, distinctive but sometimes difficult to see amongst the graminoid vegetation in which it occurs.

Element Occurrences:

Element Code: PMCYP03A35 ***Occurrence Code #:*** 002
Identification OK?: ***Survey Date:*** 1981-06-07
Last Observed: 1981-06-07 ***First Observed:*** 1981-06-07 Precision ***Code:*** S
Directions: Mirror, 2 mi SE of; Barritt Farm.
General Description: aspen parkland, pasture land
Min Elev. (m): 786 ***Max Elev. (m):*** 786 ***Best Source of Info:*** S81BIRUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S81BIRUCABCA01 Bird, C. & A.H. Marsh UC none 1981-06-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A06 12 359200 5812050 Mirror Lat/Long: 52 20/113 04. Legals do not agree with site description. 2 2314
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 004
Identification OK?: ***Survey Date:*** 1945-06-19
Last Observed: 1945-06-19 ***First Observed:*** 1945-06-19 Precision ***Code:*** M
Directions: Bow River Valley; Banff, 12 mi W of; Pilot Mt, near.
General Description: forested alluvial flats
Min Elev. (m): 1220 ***Max Elev. (m):*** 1400 ***Best Source of Info:*** S45PORNMONCA43
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45PORNMONCA43 Porsild & Breitung NM 481306 1945-06-19
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O04 11 584750 5674700 Massive 114 2032
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 005 ***Survey Date:*** 1960-07-15
Last Observed: 1960-07-15 ***First Observed:*** 1960-07-15 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Jasper Lake, S shore of.
General Description: wet depression behind dune area, upper edge of spring flood
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005 ***Best Source of Info:*** S60PORNMONCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S60PORNMONCA05 Porsild, A.E. NM 266091 1690-07-15
S60PORUAABCA05 Porsild, A.E. UA 100259 1960-07-15 Y ripe spikes
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83E01 11 430000 5880900 Jasper Lake 39 2920
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 006 ***Survey Date:*** 1983-07-15
Last Observed: 1983-07-15 ***First Observed:*** 1983-06-16 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: David Lake, N of.
General Description: wet grassland-calcareous
Min Elev. (m): 662 ***Max Elev. (m):*** 662 ***Best Source of Info:*** S83FEHPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83FEHAUABCA01 Fehr, A. and T. S. Bakshi AU 83-0522 1983-07-15 Y
S83FEHPMABCA03 Fehr, A. PM B86.17.57 1983-07-15 Y spikelets present
S83FEHPPABCA03 Fehr, A. PP 1975 1983-06-16 Uncommon
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 525850 5826000 David Lake Veg plot AF83042 28 295
Source Code Author Publisher Year Title
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 007 ***Survey Date:*** 1945-07-22
Last Observed: 1945 07-22 ***First Observed:*** 1944-07-15 Precision ***Code:*** M
Directions: Calgary; King George School, N of
General Description: Low meadow beside a little stream in valley.
Min Elev. (m): 1075 ***Max Elev. (m):*** 1075 ***Best Source of Info:*** S45XXXUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44TURUAABCA14 Turner, G.H. UA 34826 1944-07-15 Y flowers
S45MCCACONCA01 McCalla, W. C. AC 149494 1945-07-16
S45MCCUAABCA04 McCalla, W.C. UA 36151 1945-07-16 Y flowers
S45MCCUAABCA05 McCalla, W.C. UA 36150 1945-07-22 Y flowers
S45XXXUCABCA01 Unknown UC none 1945-07-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 704450 5662150 Calgary 21 1870
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 008 ***Survey Date:*** 1970-07-07
Last Observed: 1970-07-07 ***First Observed:*** 1970-07-07 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Banff NP, just outside of; North Saskatchewan River, N side of.
General Description:
Min Elev. (m): 1400 ***Max Elev. (m):*** 1400 ***Best Source of Info:*** S70HRAPMABCA16
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70HRAPMABCA16 Hrapko, J.O. & T. C. Wyn-Evans PM B70.31.100 1970-07-07 Y spikelets; excellent rhizomal development
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C02 11 523150 5761000 Owen Creek 52 00/116 40 1 2446
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 009 ***Survey Date:*** 1970-06-10
Last Observed: 1970-06-10 ***First Observed:*** 1970-06-10 ***Actual Mapping Precision (m):*** 1800 ***Precision Code:*** M
Directions: Hilda, 12 km SW of; Schuler, 10 km NW of.
General Description: grassland
Min Elev. (m): 790 ***Max Elev. (m):*** 790 ***Best Source of Info:*** S70HRAPMABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70HRAPMABCA10 Hrapko, J.O. & T. C. Wyn-Evans PM B70.19.30 1970-06-10 Y spikelets present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 559150 5585150 Schuler 50 25/110 10 11 214
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 010 ***Survey Date:*** 1976-09-09
Last Observed: 1976-09-09 ***First Observed:*** 1976-08-18 ***Actual Mapping Precision (m):*** 1600 ***Precision Code:*** M
Directions: Jasper N.P.; Talbot Lake, 1.5 km NW of; Jasper Lake, W shore of.
General Description: edge of pothole; low meadows and marshes
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005 ***Best Source of Info:*** S76SHAJPABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76SHAJPABCA02 Sharp, D.D. JP none 1976-08-18 Y fruits
S76SHAJPABCA03 Sharp, D.D. JP none 1976-09-09 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83E01 11 431000 5883700 Jasper Lake Lat/Long: 53 06/118 01 43 2924
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 011 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Empress Springs, ca. 5 km NW of Empress; N side of Red Deer River; Sect. 21 & 22-Tp23-R1-W4M
General Description: valley springs, diverse, slightly to moderately saline; locally dominant on mounds
Min Elev. (m): 594 Max Elev. (m):
Other Comments: recommend protection of springs & groundwater sources; no groundwater pumping for injection wells s/b allowed ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 565000 5647350 Empress Sect. 21 & 22-Tp23-R1-W4M 31 5996
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report
Carex parryana var parryana Parry's sedge SRank: S1S2

Element Code: PMCYP03A35 ***Occurrence Code #:*** 012 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tps 42 & 43-R1-W4M
General Description: vegetation of permanent, moder. saline springs along shore; on hummocks
Min Elev. (m): 600 ***Max Elev. (m):*** 600
Other Comments: recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgmt; confine recreatn development to existing lease
Management Comments: problems with adj. cottage dev't, OHVs, cattle grazing; active gas & oil wells on adj. lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report in-house
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 013 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M
General Description: extensive valley springs, moder. saline, in coulee along river; on hummocks in wettest part of springs
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Management Comments: current mgmt practice consistent with protectn, i.e., no grazing, no groundwater withdrawal ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 014 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Wainwright, S of & N of Metiskow ; David Lake; Tps 41, 42-R5-W4M
General Description: wet saline & subsaline meadows; along subsaline higher edges and hummocks
Min Elev. (m): 665 ***Max Elev. (m):*** 665
Other Comments: recommend protect entire wetland basin with suff. setback; reduce grazing pressure on meadows W of lake
Management Comments: ecological reserve ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526500 5826250 David Lake 38 305
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house
Carex parryana var parryana Parry's sedge SRank: S1S2
+++++++++++++++++++++++

Element Code: PMCYP03A35 ***Occurrence Code #:*** 015 ***Survey Date:*** 2000-06-17
Last Observed: 2000-06-17 ***First Observed:*** 2000-06-17 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Kootenay Plains; Siffleur Falls staging area and parking lot, close to; 100 m or so along trail towards Falls
General Description: relatively saline area (but dry) close to trail; flattish plateau of Juniper/grassland with scattered clumps of spruce; with Pyrr uni & Plant eri
Min Elev. (m): 1347 ***Max Elev. (m):*** 1347
Other Comments: specimen coll.by PJC - data to be entered
Management Comments: susceptible to eradication if trail abused ***Best Source of Info:*** F00COT01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C01 11 540553 5766542 Kootenay Plains GPS reading 52 03 00 116 24 35 33 6120
Source Code Author Publisher Year Title
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000
Date Source Abstract Code Observer Occurrence Data
2000-06-17 F00COT01ABCA P. Cotterill + Botany AB # 3 members Only 1 or 2 plants seen; prob. atypical habitat tho' saline
Carex parryana var parryana Parry's sedge SRank: S1S2

Element Code: PMCYP03A35 ***Occurrence Code #:*** 016 ***Survey Date:*** 2000-06-17

Last Observed: 2000-06-17 ***First Observed:*** 2000-06-17 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Kootenay Plains; Siffleur Falls staging area, S of; floodplain of N. Sask. River; turn S before crossing bridge and walk S along top of river escarpment to first vegetated muddy flat (W shore); also cross bridge to first mud-flat on E shore

General Description: calcareous mud flats with scattered small willows, e.g. S. athabascensis, planifolia, occas. S. melanopsis- various sedges, e.g. C. bicolor?, C. microglochin, C. maritima, C. franklinii, C. scirpoidea, Kobre myo/ Pedi gro Eipil lat, Ante pul

Min Elev. (m): 1311 ***Max Elev. (m):*** 1311 ***Slope:*** 0.00

Other Comments: specimen coll. data to be added

Management Comments: Subject to flooding (natural, upstream of dam) ***Best Source of Info:*** F00COT01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

83C01 11 540675 5765700 Kootenay Plains - N. Sask. River 35 6121

Source Code Author Publisher Year Title

F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000

Date Source Abstract Code Observer Occurrence Data

2000-06-17 F00COT01ABCA P Cotterill Several scattered plants

Carex parryana var parryana Parry's sedge SRank: S1S2

***Castilleja cusickii* yellow paintbrush**

Natural Region: Foothills Fescue Grassland
Habitat: Grassland
Phenology: flowers late May to June
Specific Search Strategies (if any): still visible in late August; search in slight depressions on the Milk River Ridge and lusher swales in the foothills.

Element Occurrences:

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Precision Code:*** S
Directions: Creek, E of
General Description: Narrow finger of grassland
Min Elev. (m): 1475 ***Max Elev. (m):*** 1475 ***Aspect:*** W ***Best Source of Info:*** M94DOW01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 698650 5538700 Whaleback - Upper Bob Creek 6 880
Source Code Author Publisher Year Title
M94DOW01ABCA Downing, D. & E. Karpuk 1994 Upper Bob Creek Ecological Reserve: physical land classification range inventory sample sites.
Date Source Abstract Code Observer Occurrence Data
Prolific
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Precision Code:*** S
Directions: Creek, E of , section,S end of
Min Elev. (m): 1450 ***Max Elev. (m):*** 1450 ***Best Source of Info:*** M94DOW01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 698200 5537900 Upper Bob Creek -Whaleback 7 881
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1986-07-00
Last Observed: 1986-07-00 ***First Observed:*** 1986-07-14 ***Precision Code:*** S
Directions: Boat launch parking lot, from; moist meadow area, SE into; road, within 15m of
General Description: Moist area, subsurface moisture, dense & tall veget., dom by native forbs - assoc plants Gali.boreale, Rosa sp., Oxy.campestris, Hedy.alpinum, Cam.rotundifolia &Cast.miniata
Min Elev. (m): 1378 ***Max Elev. (m):*** 1378 ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 320400 5430800 Police Outpost Provincial Park 5 945
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
I86WAL07ABCA Wallis, C. 1986
Date Source Abstract Code Observer Occurrence Data
Only one individual(B86WAL01ABCA)
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1986-07-20
Last Observed: 1986-07-20 ***First Observed:*** 1985-08-00 ***Precision Code:*** S
Directions: Paine Lake, SE sluice gate, approx. 1km SE of at E and of large slough.
General Description: Moist, slightly elevated, lush veg. dominated by timothy, brome & a variety of native forbs; assoc. plants inc. Perid.gairdneri, Potentilla spp.,Cam.rotundifolia & Ach.millefolium.
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370
Slope: 0.00 ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 308400 5441400 Paine Lake 49 06/113 37 69 1031
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
I85BRA02ABCA Bradley, C. 1985
Date Source Abstract Code Observer Occurrence Data
12 plants - not found in other wetland and grasslands in area; loosely grouped in 1m by 5m area.(B86WAL01ABCA)
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1972-06-05
Last Observed: 1972-06-05 ***First Observed:*** 1972-06-05 ***Precision Code:*** M
Directions: Hwy 6, N side of; viewpoint, about. 2 km E from
General Description: small patch of grassland
Min Elev. (m): 1555 ***Max Elev. (m):*** 1555 ***Best Source of Info:*** S72KUCUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72KUCUAABCA05 Kuchar, P.K. UA 46128 1972-06-05 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 298150 5438300 Chief Mountan Highway 49 04/113 44 157 1096
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1953-07-23
Last Observed: 1953-07-23 ***First Observed:*** 1953-07-11 ***Precision Code:*** G
Directions: Chief Mountain Hwy
General Description: open meadow; fescue grassland
Min Elev. (m): 1520 ***Max Elev. (m):*** 1520
Other Comments: Det. by M. Ownbey ***Best Source of Info:*** S53BREUAABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53BREUAABCA10 Breitung, A.J. UA 15375 1953-07-23 frequent; [flowers]
S53BREUAABCA11 Breitung, A.J. UA 15376 1953-07-11 frequent
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 300100 5437450 Lookout Butte 41 1013
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1941-05-18
Last Observed: 1941-05-18 ***First Observed:*** 1941-05-18 ***Precision Code:*** G
Directions: Leavitt, near
General Description: prairie
Min Elev. (m): 1250 ***Max Elev. (m):*** 1250
Other Comments: Det. by E.H. Moss as C. ? lutea Helle or C. ? spetentrionalis Lindley: annot. to C. cusickii Greenm. by J.G. Packer ***Best Source of Info:*** S41MOSUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S41MOSUAABCA01 Moss, E.H. UA 15383 1941-05-18 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 320950 5449750 Leavitt 8 948
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1989-00-00
Last Observed: 1989-00-00 ***First Observed:*** 1989-00-00 ***Precision Code:*** S
General Description: Moist drainage W of springs along the N boundary fence.
Min Elev. (m): 1385 ***Max Elev. (m):*** 1385
Other Comments: Area rich with rare species.
Management Comments: Limiting factors can be past grazing and cultivation (timothy and brome), little natural habitat. ***Best Source of Info:*** B89WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 318800 5430850 Outpost Wetlands Natural Area Site G on map. 13 953
Source Code Author Publisher Year Title
B89WAL01ABCA Wallis, Clifford Alberta Forestry, Lands & Wildlife 24p 1989 Flora and Special Features Survey of the Outpost Wetlands Natural Area
Date Source Abstract Code Observer Occurrence Data
Flowers in mid-June, tree plants.
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, assoc. plants: Poa pratensis, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1524 ***Max Elev. (m):*** 1524
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 306200 5432000 Poll Haven Community Pasture LSD 13 89 1047
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1555 ***Max Elev. (m):*** 1555
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 308650 5430650 Poll Haven Community
Pasture
LSD 2 101 1056
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1463 ***Max Elev. (m):*** 1463
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 311100 5431350 Poll Haven Community Pasture LSD 12 102 1057
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1463 ***Max Elev. (m):*** 1463
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 310350 5431000 Poll Haven Community Pasture LSD 07 103 1058
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1524 ***Max Elev. (m):*** 1524
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 309550 5431070 Poll Haven Community Pasture LSD 5 104 1059
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1988-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Moraine Blanket type (one case of Veneer) range, open meadows , strong shrub component, Festuca idahoensis, Phleum pratense, Senecio integerrimus.
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585
Management Comments: Grazed, logging is going on. ***Best Source of Info:*** B89EAS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 309550 5431850 Poll Haven Community Pasture LSD 13 105 1060
Source Code Author Publisher Year Title
B89EAS01ABCA Eastern Slopes Rangeland Consultants Alberta Forestry, Lands & Wildlife 1989 Survey of Rare, Uncommon and Disjunct Vascular Plants of the Poll Haven Community Pasture Grazing Lease 33957
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1992-05-31
Last Observed: 1991-05-31 ***First Observed:*** 1966-06-11 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Whiskey Gap
General Description: Rough fescue grasslands; occuring in association with Geranium viscosissimum
Min Elev. (m): 1400 ***Max Elev. (m):*** 1400
Other Comments: C. septentrionalis revised to C. cusickii - J. G. Packer 1978 ***Best Source of Info:*** S92SOMCFABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66DEVUCABCA01 de Vries, B.D. UC 22982 1966-06-11
S92SOMCFABCA04 Sommerfeldt, B. CF 860181 1992-05-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 351850 5432500 Whiskey Gap 20 960
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Castilleja cusickii yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1982-06-17
Last Observed: 1982-06-17 ***First Observed:*** 1982-06-17 ***Precision Code:*** S
Directions: Highway 6, along; road to Hill Spring, 5km north of
General Description: Low, wet, grassy ditches and adjacent embankments by roadside.
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Best Source of Info:*** S82CHIUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82CHIUCABCA01 Chinnappa, C.C., Luc Brouillet, B.G. Warner & E. Simons UC 45021 1982-06-17 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 288550 5471700 Indianfarm Creek 2 1330
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1971-06-10
Last Observed: 1971-06-10 ***First Observed:*** 1971-06-10 ***Precision Code:*** G
Directions: Mountain View & Leavitt, between
General Description: moist; grassy side of road
Min Elev. (m): 1325 ***Max Elev. (m):*** 1325
Other Comments: Det. N. Holmgren 1971 ***Best Source of Info:*** S71KUIULABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71KUIULABCA10 Kuijt, J. & D.R. Dobbins UL none 1971-06-10 [90%]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 312900 5444950 Mountain View 153 1095
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1969-06-15
Last Observed: 1969-06-15 ***First Observed:*** 1969-06-15 ***Precision Code:*** S
Directions: Park entrance
General Description: dry SW slope
Min Elev. (m): 1273 ***Max Elev. (m):*** 1273 ***Aspect:*** SW
Other Comments: Det. J.Kuijt ***Best Source of Info:*** S69BLAULABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BLAULABCA06 Blais, W. UL none 1969-06-15 [90%]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 292550 5443850 Park Entrance 49 07/113 51 143 1087
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 022 ***Survey Date:*** 1986-05-24
Last Observed: 1986-05-24 ***First Observed:*** 1986-05-24 ***Precision Code:*** M
Directions: Whiskey Gap, Sommerfeldt Ranch
General Description: Rough fescue grassland
Min Elev. (m): 1280 ***Max Elev. (m):*** 1400 ***Best Source of Info:*** S86SOMCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86SOMCFABCA01 Sommerfeldt, B. CF 860181 1986-05-24 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 023 ***Survey Date:*** 1966-09-18
Last Observed: 1966-09-18 ***First Observed:*** 1966-09-18 ***Precision Code:*** M
Directions: One mile north of Cochrane on a north sloping hill
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Aspect:*** N ***Best Source of Info:*** S66SCHUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66SCHUCABCA01 Schreiber, A. UC 22984 1966-09-18
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 677750 5675700 Cochrane 7 1858
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 025 ***Survey Date:*** 1975-07-07
Last Observed: 1975-07-07 ***First Observed:*** 1975-07-07 ***Precision Code:*** M
Directions: Monarch; North East Slopes, above river bottom.
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** NE ***Best Source of Info:*** S75KUIULABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75KUIULABCA01 Kuijt, J. UL none 1975-07-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 346550 5517050 Monarch 1 1391
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 026 ***Survey Date:*** 1944-07-21
Last Observed: 1944-07-21 ***First Observed:*** 1944-07-21 ***Precision Code:*** M
Directions: Banff National Park; Mt. Aberdun, S of; Paradise Valley.
Min Elev. (m): 1996 ***Max Elev. (m):*** 1996 ***Best Source of Info:*** S44SANUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44SANUCABCA01 Sanson, N. UC none 1944-07-21 [bloom]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82N08 11 553150 5690050 Paradise Valley 99 1786
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 027 ***Survey Date:*** 1915-06-07
Last Observed: 1915-06-07 ***First Observed:*** 1915-06-07 ***Precision Code:*** M
Directions: Calgary, S of; Midnopore.
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044
Other Comments: Det. by B.M. Hallworth, January 1980. ***Best Source of Info:*** S15SANUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S15SANUCABCA02 Sanson, N. UC none 1915-06-07 [bloom]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 705850 5644300 Midnapore 15 1709
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 028 ***Survey Date:*** 1995-07-19
Last Observed: 1995-07-19 ***First Observed:*** 1994-06-17 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Wishbone Trail, Y camp meadow
General Description: Foothills Parkland; Poa spp. - Bromis inermis - Phleum pratense community; subxeric, rapidly drained Regosolic Brown
Min Elev. (m): 1280 ***Max Elev. (m):*** 1290
Slope: 5.00 ***Aspect:*** W ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** PNDACH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94ACHWLABCA07 Achuff, P. WL none 1994-06-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 292400 5440875 Lower Waterton Lake Site PA 4016.1 527 1295
Castilleja cusickii yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D0Q0 ***Occurrence Code #:*** 029 ***Survey Date:*** 1995-05-27
Last Observed: 1995-05-27 ***First Observed:*** 1995-05-27 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Del Bonita, 26 km W of; Hwy 501, along
General Description: growing on moist native grassland; Dodecatheon conjugens/Zizia aptera/grasses and sedges
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280 ***Size of Occurrence:*** ***Best Source of Info:*** S95DOLULABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95DOLULABCA01 Dolman, Teresa UL none 1995-05-27
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 344200 5432600 Rolph Creek 49 01N 113 08W 46 6349
Castilleja cusickii yellow paintbrush SRank: S2S3

Castilleja lutescens stiff yellow paintbrush

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass
Habitat: Grassland
Phenology: flowers in June in grassland regions
Specific Search Strategies (if any): moist swales; may occur on slightly sandier sites in the grassland region

Element Occurrences:

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1985-08-14
Last Observed: 1985-08-14 ***First Observed:*** 1985-08-14 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Cardinal Divide, at.
General Description: subalpine meadows with patches of Picea forest; growing on moist grassy stony-gravelly soil at base of Picea trees, in association with Zigadenus elegans, Phyllodoce glanduliflora, etc; abundant
Min Elev. (m): 1981 ***Max Elev. (m):*** 1981 ***Best Source of Info:*** S85GRUUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85GRUUAABCA01 Gruezo, W.S.M. UA 91541 1985-08-14 abundant, common
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C14 11 483400 5860400 Cardinal Divade 90 2700
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1977-06-15
Last Observed: 1977-06-15 ***First Observed:*** 1976-07-21 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Jasper N.P.; Jasper and Talbot Lakes, between.
General Description: grassland margine in dunes and marsh-damp
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005 ***Best Source of Info:*** S77SHAUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76SHAUAABCA05 Sharp, D.D. UA 83896 1976-07-21
S77SHAUAABCA01 Sharp, D.D. UA 83898 1977-06-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83E01 11 432000 5882450 Jasper Lake 18 2900
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1979-07-17
Last Observed: 1979-07-17 ***First Observed:*** 1979-07-17 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Fort Macleod, ~2.5 km NE of; Macleod Island.
General Description: island cut; Populus angustifolia-P. balsamifera riparian woodland; assoc. spp.: Rosa acicularia, Bromus inermis, Poa interior
Min Elev. (m): 945 ***Max Elev. (m):*** 945 ***Best Source of Info:*** S79BRAUAABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79BRAUAABCA09 Bradley, C., C. Wallis UA 84308 1979-07-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 328100 5513150 Macleod Island 9 6042
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1979-06-28
Last Observed: 1979-06-28 ***First Observed:*** 1979-06-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Dyson Creek, 2 km E of; Green Mountain, S foot of.
General Description: narrow band of old-growth spruce on stream alluvium; spp.: spruce, subalpine fir, Ribes lacustre, Lonicera involucrata, Equisetum arvense, mosses, 65% cover
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585
Slope: 10.00 ***Best Source of Info:*** S79MCCUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79MCCUAABCA01 McCallum, B., J. Corbin UA 90117 1979-06-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J10 11 667800 5609500 Green Mountain 47 6043
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1974-07-25
Last Observed: 1974-07-25 ***First Observed:*** 1974-06-28 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Police Outpost P.P., at. (6-1-26-W4)
General Description: fescue grassland near aspen groves
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370 ***Best Source of Info:*** S74SHAUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74DANUCABCA14 Danielson, Barbara & S. Crack UC 23007 1974-07-25 common
S74SHAUAABCA05 Shaw, K. UA 75606 1974-07-25
S74SHAUAABCA06 Shaw, K. UA 75605 1974-06-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 319950 5430950 Police Outpost Provincial Park 19 959
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1940-06-17
Last Observed: 1940-06-17 ***First Observed:*** 1940-06-17 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Marna Lake, 4 km NE of; Castle River, 2 km S of.
General Description: prairie slope of ridge
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310 ***Best Source of Info:*** S40SSSUAABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S40SSSUAABCA09 S.S. Survey UA 15387 1940-06-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 712400 5483400 West Castle 98 742
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1978-07-12
Last Observed: 1978-07-12 ***First Observed:*** 1978-07-12 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cripple Creek, drainage area
General Description: upland meadow in creek drainage; gentle SE slope
Min Elev. (m): 1555 ***Max Elev. (m):*** 1555 ***Aspect:*** SE
Other Comments: Id by John Corbin; 11UTL888325 ***Best Source of Info:*** S78JAQUCABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78JAQUCABCA05 Jaques, Dennis UC 44438 1978-07-12
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H13 12 288600 5532400 Cripple Creek 11 UTL 886324; Map sheet 82H13 6 1386
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1970-06-03
Last Observed: 1970-06-03 ***First Observed:*** 1970-06-03 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Hand Hills; Little Fish Lake, N of
General Description: grassland, undisturbed for 3 years
Min Elev. (m): 885 ***Max Elev. (m):*** 952
Other Comments: Annt. by J.G. Packer to C. lutescens 1978 ***Best Source of Info:*** S70OWEUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70OWEUCABCA03 Owen, R.A. UC 23002 1970-06-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 411925 5697400 Hand Hills S25 R17 T28 W4 15 6344
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1961-06-20
Last Observed: 1961-06-20 ***First Observed:*** 1961-06-20 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Langdon, ~5km N of; Weed Lake; Hwy 797, along
General Description: moist roadside
Min Elev. (m): 1006 ***Max Elev. (m):*** 1006
Other Comments: Revd by J.G. Packer Nov 1978 to C. lutescens ***Best Source of Info:*** S61CARUCABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S61CARUCABCA07 Carefoot, J. R. UC 23003 1961-06-20
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P04 12 312000 5654775 Weed Lake 7 6346
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1959-07-03
Last Observed: 1959-07-03 ***First Observed:*** 1959-07-03 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Spray Lakes Reservoir, S of; Spray Lakes Road; Mud Lake, near
General Description: spruce-pine stand
Min Elev. (m): 1850 ***Max Elev. (m):*** 1850 ***Size of Occurrence:*** ***Best Source of Info:*** S59OGIUCABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S59OGIUCABCA05 Oglivie, R.T. UC 23143 1959-07-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J14 11 619250 5628100 Mud Lake 31 5246
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1975-07-07
Last Observed: 1975-07-07 ***First Observed:*** 1975-07-07 ***Precision Code:*** M
Directions: Monarch
General Description: NE facing slopes above river
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** NE ***Size of Occurrence:*** ***Best Source of Info:*** S75KUIULABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75KUIULABCA02 Kuijt, J. UL none 1975-07-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 346550 5517050 Monarch 1 1391
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1969-06-30
Last Observed: 1969-06-30 ***First Observed:*** 1969-06-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Interpretive Bldg. Hill
General Description: damp SE grassy slope; yellow
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Aspect:*** SE ***Size of Occurrence:*** ***Best Source of Info:*** S69BLAULABCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BLAULABCA36 Blais, W. & J. Nagy UL none 1969-06-30 yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 287550 5438000 Interpretive parking lot 134 1078
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1969-06-03
Last Observed: 1969-06-03 ***First Observed:*** 1969-06-03 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bellevue Hill
General Description: open shale crest
Min Elev. (m): 1829 ***Max Elev. (m):*** 1829
Other Comments: pale yellow ***Best Source of Info:*** S69NAGULABCA56
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69NAGULABCA56 Nagy, J. & W. Blais UL none 1969-06-03 pale yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 288000 5443400 Bellevue Hill 49 06/113 55 241 1152
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1969-08-08
Last Observed: 1969-08-08 ***First Observed:*** 1969-06-02 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Bellevue Hill
General Description: open grassy S slope; shale
Min Elev. (m): 1432 ***Max Elev. (m):*** 1463 ***Aspect:*** S
Other Comments: pale yellow ***Best Source of Info:*** S69NAGULABCA58
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69NAGULABCA57 Nagy, J. & W. Blais UL none 1969-06-02 pale yellow
S69NAGULABCA58 Nagy, J. UL none 1969-08-08
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 287600 5442650 Bellevue Hill 49 06/113 55 216 1137
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1969-06-23
Last Observed: 1969-06-23 ***First Observed:*** 1969-06-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Red Rock, 1.6 km NW of
General Description: damp, grassy SW slope
Min Elev. (m): 1676 ***Max Elev. (m):*** 1676 ***Aspect:*** SW
Other Comments: yellow ***Best Source of Info:*** S69BLAULABCA37
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BLAULABCA37 Blais, W. & J. Nagy UL none 1969-06-23 yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716000 5447450 Red Rock Canyon 49 08/114 02 141 569
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1969-07-31
Last Observed: 1969-07-31 ***First Observed:*** 1969-07-31 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Ruby Lake, SE watershed
General Description: non-flowing (quit flowing in last week)
Min Elev. (m): 2072 ***Max Elev. (m):*** 2072
Other Comments: green-yellow ***Best Source of Info:*** S69NAGULABCA55
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69NAGULABCA55 Nagy, J. & W. Blais UL none 1969-07-31 green - yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 717600 5441750 Ruby Lake 49 05 / 114 01 134 565
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1967-07-23
Last Observed: 1967-07-23 ***First Observed:*** 1967-07-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Banff National Park; Tunnel Mountain, SE side of
General Description: dark, dry soil in open woods; various grasses and stands of P. contorta nearby
Min Elev. (m): 1524 ***Max Elev. (m):*** 1524 ***Aspect:*** SE ***Size of Occurrence:*** ***Best Source of Info:*** S67VISUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67VISUCABCA01 Visser, S. UC 23006 1967-07-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O04 11 601400 5669850 Tunnel Mountain 97 2018
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1987-08-03
Last Observed: 1987-08-03 ***First Observed:*** 1987-08-03 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Mount Allen, SE slope of; Centennial Trail
General Description: alpine meadow, SE slope, thin top soil and gravel
Min Elev. (m): 2530 ***Max Elev. (m):*** 2530 ***Aspect:*** SE ***Size of Occurrence:*** ***Best Source of Info:*** S87PODUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87PODUCABCA01 Podrasky, Yan UC 49620 1987-08-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J14 11 625800 5645500 Mount Allen 74 6364
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1966-10-08
Last Observed: 1966-10-08 ***First Observed:*** 1966-10-08 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: High River, 4.8 km SW of
General Description: at edge of dry pastureland
Min Elev. (m): 1060 ***Max Elev. (m):*** 1080 ***Size of Occurrence:*** ***Best Source of Info:*** S66GETUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66GETUCABCA01 Getty, I. UC 23009 1966-10-08
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I12 12 291650 5604050 High River 12 6365
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1981-06-20
Last Observed: 1981-06-20 ***First Observed:*** 1965-07-01 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Calgary, NW of; Nose Hill
General Description: prairie, S-facing slope; grassy sloped area
Min Elev. (m): 1160 ***Max Elev. (m):*** 1225 ***Aspect:*** S ***Size of Occurrence:*** ***Best Source of Info:*** S81STEUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S65BIRUCABCA08 Bird, Ann L. UC 23001 1965-07-01
S71DARUCABCA01 D'Arey, W.G. UC 23008 1971-07-02 flowers pure yellow
S81STEUCABCA02 Stewart, Elaine UC 37690 1981-06-20
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 702000 5666675 Calgary - Nosehill 29 1878
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 022 ***Survey Date:*** 1971-06-10
Last Observed: 1971-06-10 ***First Observed:*** 1971-06-10 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Blakiston Creek Bridge, just N of
General Description: gravelly roadside
Min Elev. (m): 1310 ***Max Elev. (m):*** 1370 ***Size of Occurrence:*** ***Best Source of Info:*** S71KUIULABCA42
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71KUIULABCA42 Kuijit & D.R. Dobbins UL none 1971-06-10
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 289600 5439850 Blakiston Creek 49 05/113 53 193 1123
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 023 ***Survey Date:*** 1972-07-09
Last Observed: 1972-07-09 ***First Observed:*** 1972-07-09 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Bellevue, 0.5 mi W of; Frank Slide, S edge of
General Description: rocky soil in edge of slide
Min Elev. (m): 1280 ***Max Elev. (m):*** 1310 ***Size of Occurrence:*** ***Best Source of Info:*** S72SHAULABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72SHAULABCA08 Sharp, W.H. UL none 1972-07-09
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 688600 5496500 Frank Slide 4 823
Castilleja lutescens stiff yellow paintbrush SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0D1Y0 ***Occurrence Code #:*** 024 ***Survey Date:*** 1964-06-30
Last Observed: 1964-06-30 ***First Observed:*** 1964-06-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Waterton Lakes N.P.; Hwy 5 and Red Rock Canyon Roads junction, 400 m N of
General Description: on open dry prairie
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310
Other Comments: ccasional ***Best Source of Info:*** S64DEVUCABCA32
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVUCABCA32 de Vries, B. UC 23146 1964-06-30 occasional
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 289925 5440250 Blakiston Creek 18 991
Castilleja lutescens stiff yellow paintbrush SRank: S2S3

Castilleja sessiliflora downy paintbrush

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in early June
Specific Search Strategies (if any): in lusher parts of the dunes but on very small patches of level eroding gravelly sands

Element Occurrences:

Element Code: PDSCR0D300 ***Occurrence Code #:*** 001 ***Survey Date:*** 1985-06-09
Last Observed: 1985-06-09 ***First Observed:*** 1979-07-06 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 8 km N of; Lost River Valley, E slope of.
General Description: alluvial sand; xeric mixed prairie; stabilized dunes
Min Elev. (m): 861 ***Max Elev. (m):*** 899 ***Best Source of Info:*** S85WALUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79STGULABCA02 STG UL none 1979-07-06 fruiting
S85WALUAABCA01 Wallis, C. UA 098407 1985-06-09 Y Uncommon, rare in overall area; flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
I85WAL01ABCA Wallis, C. 1985
I85WAL02ABCA Wallis, C. 1985
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Castilleja sessiliflora downy paintbrush SRank: S1

Cerastium brachypodum

Natural Region: Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers in late May and early June
Specific Search Strategies (if any): search for small ephemeral wetlands in sand plains; occurs in bottoms and around rims of very small depressions

Element Occurrences:

None recorded in ANHIC database but is known from Redcliff and Pakowki Lake areas.

Chenopodium desiccatum goosefoot

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in late July
Specific Search Strategies (if any): visible in August and early September; taxonomic difficulties; active dunes; occasional in sandy, gravelly soil of alkali wetlands and other types of disturbed areas

Element Occurrences:

Element Code: PDCHE090H0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-07-14
Last Observed: 1989-07-14 ***First Observed:*** 1989-07-14 ***Precision Code:*** M
Directions: Bow City, about 10 km W of; Hwy 539, off.
General Description: Stipa comata grassland; on undisturbed soil in saline depression.
Min Elev. (m): 800 ***Max Elev. (m):*** 800
Other Comments: Det. by K. Tannas; specimen housed in E.S.R.C. herbarium. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I08 12 404350 5586800 Bow City 1 1418
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
several sporadically occurring individuals; plants were small, leaves relatively thick abd flushy, these have separated it from Chenopodium pratericola (note that Scoggan lumps the two)
Chenopodium desiccatum goosefoot SRank: S1S2
++++++++++++++++++++++

Element Code: PDCHE090H0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1970-08-12
Last Observed: 1970-08-12 ***First Observed:*** 1970-08-12 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Orion, 5 mi. S of; Pakowki sand dunes.
General Description: Open sand.
Min Elev. (m): 876 ***Max Elev. (m):*** 876
Other Comments: Id. by DAO Taxonomy Personnel. ***Best Source of Info:*** S70SMOALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70SMOALABCA02 Smoliak, S., R. Gschiad & T.D. Allen AL 2556 1970-08-12 blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 512223 5469883 Pakowki Sand Dunes Lat/Long:49 23/110 50 4 85
Chenopodium desiccatum goosefoot SRank: S1S2
++++++++++++++++++++++

Element Code: PDCHE090H0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1914-08-01
Last Observed: 1914-08-01 ***First Observed:*** 1914-08-01 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Madicine Hat; Seven Persons Coulee; Medicine Hat College, 1 km NE od.
General Description: coulee
Min Elev. (m): 655 ***Max Elev. (m):*** 655 ***Best Source of Info:*** S14FYLACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14FYLACONCA01 Fyles, F. AC 141527 1914-08-01
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 523450 5541000 Medicine Hat 13 3825
Chenopodium desiccatum goosefoot SRank: S1S2
++++++++++++++++++++++

Element Code: PDCHE090H0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1977-09-01
Last Observed: 1977-09-01 ***First Observed:*** 1977-09-01 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Orion, 6 km E of.
General Description: scattered to rare in disturbed areas
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** S77CROACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77CROACONCA01 Crompton, C.W. AC 163922 1977-09-01 scattered to rare
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 516873 5477782 Orion 16 3827
Chenopodium desiccatum goosefoot SRank: S1S2
++++++++++++++++++++++

Element Code: PDCHE090H0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1969-09-10

Last Observed: 1969-09-10 ***First Observed:*** 1969-09-10 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M

Directions: Wild Horse, 11 km N of; Sage Creek

General Description: edge of water pool - sandy gravelly soil; only one plant

Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** S69BASACONCA02

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S69BASACONCA02 Bassett, I.J. & B.R. Baum AC 141529 1969-09-10 only 1 plant seen

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E01 12 557325 5439525 Sage Creek 15 3830

Chenopodium desiccatum goosefoot SRank: S1S2

++++++++++++++++++++++++

Element Code: PDCHE090H0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1950-07-21

Last Observed: 1950-07-21 ***First Observed:*** 1950-07-21 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M

Directions: Redcliff, SW of; South Saskatchewan River, bank of.

General Description: arid gravelly bank of valley, in Opuntia-short grass prairie

Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S50DORACONCA11

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S50DORACONCA11 Dore, W. G. & A.J. Breitung AC 134764 1950-07-21

S50DORACONCA12 Dore, W.G. & A.J. Breitung AC 136725 1949-08-22 sticky annual; petals white; calyx and stamen red.

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L02 12 513550 5545050 Redcliff 14 3831

Chenopodium desiccatum goosefoot SRank: S1S2

Chenopodium incanum goosefoot

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers in late July, early August
Specific Search Strategies (if any): not all dots in Moss are recorded in ANHIC EOs; taxonomic problems; in addition to eroding sands, occurs on shorelines

Element Occurrences:

Element Code: PDCHE090T0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1999-08-15
Last Observed: 1999-08-15 ***First Observed:*** 1999-08-15 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Eagle Butte, 4 km NE of; Fly Lake, 3.5 km S of.
General Description: stock pond area, along shore; with Alopecurus aequalis, Carex sp.; hygric
Min Elev. (m): 1355 ***Max Elev. (m):*** 1355
Slope: 10.00 ***Aspect:*** SW
Other Comments: Slope less than 10%. Specimen has been collected, collector number 0011. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 544700 5495950 Eagle Butte 6-8-3 W4M 64 5512
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-15 U99BRA01ABCA Reg Ernst less than 20 plants
Chenopodium incanum goosefoot SRank: S1

Chenopodium subglabrum smooth narrow-leaved goosefoot

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in July and early August
Specific Search Strategies (if any): begin search at edge of active dune and work outwards always staying within an area where there are patches of eroding sand; distinctive species

Element Occurrences:

Element Code: PDCHE091G0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-07-20
Last Observed: 1986-07-20 ***First Observed:*** 1986-07-20 ***Precision Code:*** M
Directions: Orion, SW of.
General Description: Sand on N facing slope of active dune
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Aspect:*** N ***Best Source of Info:*** S86HRAPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA01 Hrapko, J. & Parker, M. PM B86.140.15 1986-07-20 Flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Date Source Abstract Code Observer Occurrence Data
rare
Chenopodium subglabrum smooth narrow-leaved goosefoot SRank: S1
++++++++++++++++++++++

Element Code: PDCHE091G0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1987-08-04
Last Observed: 1987-08-04 ***First Observed:*** 1987-08-04 ***Precision Code:*** M
Directions: Coronado
Min Elev. (m): 678 ***Max Elev. (m):*** 678 ***Best Source of Info:*** S87NELPPABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87NELPPABCA03 Nelson PP 788 1987-08-04
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 541650 5633700 Cavendish S 1/2 7 3 250
Chenopodium subglabrum smooth narrow-leaved goosefoot SRank: S1
++++++++++++++++++++++

Element Code: PDCHE091G0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1988-07-20
Last Observed: 1988-07-20 ***First Observed:*** 1986-07-00 ***Precision Code:*** M
Directions: Turin Dunes
General Description: Sand dunes
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Best Source of Info:*** S88ALLPPABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88ALLPPABCA01 Allen, L & MacDonald, C PP 46 1988-07-20
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 388700 5526000 Turin 2 1399
Source Code Author Publisher Year Title
I86WAL06ABCA Wallis, C. 1986
Chenopodium subglabrum smooth narrow-leaved goosefoot SRank: S1
++++++++++++++++++++++

Element Code: PDCHE091G0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1985-08-28
Last Observed: 1985-08-28 ***First Observed:*** 1985-08-28 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 8 km N of; Lost River Valley, E slope of.
General Description: stabilized sand dunes
Min Elev. (m): 861 ***Max Elev. (m):*** 899 ***Best Source of Info:*** S85WALUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA02 Wallis, C. UA 098378 1985-08-28 Y rare; fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Chenopodium subglabrum smooth narrow-leaved goosefoot SRank: S1

Chenopodium watsonii Watson's goosefoot

Natural Region: Dry Mixedgrass
Habitat: Slopes-Badlands
Phenology: flowers in August
Specific Search Strategies (if any): unknown

Element Occurrences:

Element Code: PDCHE091K0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1967-09-01
Last Observed: 1967-09-01 ***First Observed:*** 1967-09-01 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Sunnynook, 13.5 km W of; Bullpound Creek Crossing, 1 km W of.
General Description: low land; dry clay soil; only a few plants.
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** S67BASACONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67BASACONCA03 Bassett, I.J. AC none 1967-09-01 only a few plants seen
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M05 12 440000 5683400 Bullpound Creek 1 3833
Chenopodium watsonii Watson's goosefoot SRank: S1
++++++++++++++++++++++++

Element Code: PDCHE091K0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1951-08-13
Last Observed: 1951-08-13 ***First Observed:*** 1951-08-13 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Walsh.
General Description: base of eroded slope, coulee
Min Elev. (m): 745 ***Max Elev. (m):*** 745 ***Best Source of Info:*** S51MOSUAABCA22
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51MOSUAABCA22 Moss, E.H. UA 7894 1951-08-13 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E16 12 568300 5532400 Walsh 50 07/110 04 6 4464
Chenopodium watsonii Watson's goosefoot SRank: S1

Coreopsis tinctoria common tickseed

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland
Phenology: flowers mid-July to August
Specific Search Strategies (if any): wetland edges, both sandy and alkali where there is mineral soil; also on human-caused disturbances; showy and unmistakable where it occurs

Element Occurrences:

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-08-24
Last Observed: 1995-08-24 ***First Observed:*** 1995-08-24 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 15 km SSW of; Cypress Hills plateau, SW side of; Michel Reservoir, southern end of.
General Description: Hygric alkaline sandy clay loam of coulee basin creek bottom, with downdrained wetland grassland of Hordeum jubatum -Deschampsia cespitosa - Bechmannia syzigachne - Mentha arve...
Min Elev. (m): 1106 ***Max Elev. (m):*** 1106 ***Size of Occurrence:*** ***Best Source of Info:*** S95MACUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACUAABCA01 Macdonald, I.D. UA none 1995-08-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 545874 5486081 Michel Reservoir Site 28; 49 31/110 22; LSD 8 20 116
Coreopsis tinctoria common tickseed SRank: S2
++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1938-07-12
Last Observed: 1938-07-12 ***First Observed:*** 1938-07-12 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Brooks.
General Description: Roadside slough.
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** S38SEXALABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S38SEXALABCA04 Sexsmith J.J. AL 1133 1938-07-12 Y blooming
S38SEXALABCA07 Sexsmith J.J. AL 5016 1938-07-12 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 436300 5602425 Brooks 5 236
Coreopsis tinctoria common tickseed SRank: S2
++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1974-07-24
Last Observed: 1974-07-24 ***First Observed:*** 1974-07-24 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Brooks, 4.5 km SE of; Alberta Horticultural Station.
General Description: Growing on roadside amongst other weedy species.
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** S74LEGUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74LEGUCABCA01 Legge, R.L. UC 37750 1974-07-24 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 440150 5599750 Provincial Horticultural Station - Brooks 6 237
Coreopsis tinctoria common tickseed SRank: S2
++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1947-08-03
Last Observed: 1947-08-03 ***First Observed:*** 1914-07-31 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Medicine Hat; Police Point.
General Description: near stream
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S14FYLACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14FYLACONCA02 Fyles, F. AC 357145 1914-07-31
S47TURNMONCA02 Turner, G.H. NM 106855 1947-08-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Coreopsis tinctoria common tickseed SRank: S2
++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1952-08-09
Last Observed: 1952-08-09 ***First Observed:*** 1895-08-10 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Roytal, 6 km W of; Seven Persons Coulee.
General Description: flats of the creek
Min Elev. (m): 693 ***Max Elev. (m):*** 693 ***Best Source of Info:*** S52BOIACONCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIACONCA06 Boivin, Bernard & J.F. Alex AC 141990 1952-08-09
S95MACNMONCA43 Macoun NM 106856 1895-08-10
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 519675 5536900 Seven Persons Creek 6 162
Coreopsis tinctoria common tickseed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1973-07-22
Last Observed: 1973-07-22 ***First Observed:*** 1973-07-22 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Buffalo Road; ~1.9 km Eof; Twin Peaks; ~750 m W of Northern peak of.
General Description: on a trail way along the road to Council Bluff
Min Elev. (m): 640 ***Max Elev. (m):*** 640 ***Best Source of Info:*** S73JOHPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73JOHPMABCA04 Johnson, Hope PM B73.69.51 1973-07-22 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 524275 5581100 CFB Suffield-Twin Peaks 50-23N/110-39W 27 4313
Coreopsis tinctoria common tickseed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1994-07-14
Last Observed: 1994-07-14 ***First Observed:*** 1994-07-14 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Twin Peaks; ~3.9 km SSW of S. peak of; South Sask. River, 2.9 km W of.
General Description: wetland 115, Deschampsia cespitosa - Hordeum jubatum - Carex douglasii community
Min Elev. (m): 700 ***Max Elev. (m):*** 700 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94GENPMABCA02 Gentle, Garry PM B94.11.394 1994-07-14 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 524400 5577000 CFB Suffield 524400/5577000;50-20'40"N/110-39'25"W 28 4326
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Coreopsis tinctoria common tickseed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST2L0V0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1995-07-18
Last Observed: 1995-07-18 ***First Observed:*** 1995-07-18 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Twin Peaks; ~2.9 km SSW of S. peak of; S. Saskatchewan River; ~3 km W of.
General Description: sandy clay loam in seanonally moist depression on moraine plain with subhygric meadow of Coreopsis tinctoria - Descurainia pinnata - Artem lidoviciana - Poa palustris - Hordeum jubatum
Min Elev. (m): 695 ***Max Elev. (m):*** 695 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA12 Macdonald, I.D. PM B95.9.25 1995-07-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 522850 5578075 CFB Suffield 50-21'23"N/110-41'25"W; 29 4327
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Coreopsis tinctoria common tickseed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST2L0V0 **Occurrence Code #:** 009 **Survey Date:** 1999-07-27
Last Observed: 1999-07-27 **First Observed:** 1999-07-27 **Actual Mapping Precision (m):** 100 **Precision Code:** S
Directions: Lethbridge, city of; SW corner of Sportsplex Arena property, E side of College Drive.
General Description: vacant city lot; semi-moist, with ground squirrel burrows; mix of introduced & native spp
Slope: 0.00
Other Comments: May be mown before flowering
Management Comments: Area likely will be developed; probably owned by Lethbridge Community College **Best Source of Info:** U99COR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 369550 5502850 Lethbridge 30 5278
Source Code Author Publisher Year Title
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1999-07-27 U99COR01ABCA A. Corbiere 6 individuals,; 90% flowering
Coreopsis tinctoria common tickseed SRank: S2
+++++++++++++++++++++++

Element Code: PDAST2L0V0 **Occurrence Code #:** 010 **Survey Date:** 1999-08-13
Last Observed: 1999-08-13 **First Observed:** 1999-08-13 **Actual Mapping Precision (m):** 200 **Precision Code:** S
Directions: Lethbridge, city of; Exhibition Grounds gates; N of, near 34 St. S & N Parkside Drive.
General Description: vacant city lot, with mix of introduced & native spp. Associated species: Het vill, Tar off, Rum sp., Ave fat
Min Elev. (m): 920 **Max Elev. (m):** 920
Slope: 0.00
Management Comments: Area will be developed. Suggest plants be transplanted and/or seed harvested. **Best Source of Info:** U99COR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 370900 5505750 Lethbridge 31 5195
Source Code Author Publisher Year Title
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1999-08-13 U99COR01ABCA A. Corbiere, L. Hutchinson Over 100 individuals, 100% flowering
Coreopsis tinctoria common tickseed SRank: S2

Crepis occidentalis small-flowered hawk's-beard

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers late May to early June
Specific Search Strategies (if any): wide area searches in sandy grasslands; tends to be sparsely distributed over large areas; occurs on upper slopes and level uplands

Element Occurrences:

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1952-08-13
Last Observed: 1952-08-13 ***First Observed:*** 1952-08-13 ***Precision Code:*** M
Directions: Mount Dungarvan; Crete sud-ouest, vers 1850m
General Description: Pente schisteuse a exposition merdionale
Min Elev. (m): 1850 ***Max Elev. (m):*** 1850 ***Aspect:*** SW ***Best Source of Info:*** S52BOIUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIACONCA01 Boivin, B. AC 141982 1952-08-13 GWD
S52BOIUAABCA01 Boivin, B. & J.F. Alex UA 72851 1952-08-13 Y fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 282550 5447450 Mount Dungarvan 158 1097
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1986-07-07
Last Observed: 1986-07-07 ***First Observed:*** 1986-07-07 ***Precision Code:*** M
General Description: coulee slope, moist Festuca- Danthonia community with abundant forbs; assoc. with Carex Microptera, Juncus confusus & Bromus carinatus.
Min Elev. (m): 1235 ***Max Elev. (m):*** 1235 ***Aspect:*** E ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 457224 5427783 Sweetgrass Hills LAT/LONG: 49 00'/ 111 35' 4 52
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
several plants found
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1986-07-07
Last Observed: 1986-07-07 ***First Observed:*** 1986-07-07 ***Precision Code:*** M
General Description: Mixed grassland at edge of coulee.
Min Elev. (m): 1029 ***Max Elev. (m):*** 1029 ***Aspect:*** N ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 465724 5430784 Macdonald Creek Lat/Long: 49 02'/ 111 28' 1 36
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
Several plants found, but no others along several hundred metres of coulee.
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1990-05-14
Last Observed: 1990-05-14 ***First Observed:*** 1988-00-00 ***Precision Code:*** M
Directions: North side of Milk River, AB.
General Description: Short grass prairie, well drained.
Min Elev. (m): 900 ***Max Elev. (m):*** 920 ***Best Source of Info:*** S88SCOCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S88SCOCFABCA01 Scotter, G.W. CF 880815 1988-00-00 Flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E03 12 481823 5445785 Ross Ranch 2 37
Date Source Abstract Code Observer Occurrence Data
Flowers, fruits.
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1990-02-19
Last Observed: 1990-02-19 ***First Observed:*** 1976-00-00 ***Precision Code:*** S
Directions: Police coulee.
General Description: Coulee grassland.
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S76WERUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76WERUAABCA01 Wershier, C. UA 75244 1976-05-00 Y [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 453374 5435633 Writing-on-stone Provincial Park 6 54
Date Source Abstract Code Observer Occurrence Data
Flowers + fruits.
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1990-02-16
Last Observed: 1990-02-16 ***First Observed:*** 1964-00-00 ***Precision Code:*** M
Directions: Writing-on-Stone Provincial Park
General Description: Uncommon on heavy textured soils at base of S facing slope and among sandstone formations.
Min Elev. (m): 880 ***Max Elev. (m):*** 900 ***Aspect:*** S ***Best Source of Info:*** S64DEVUCABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVUCABCA08 de Vries, B. UC 27025 1964-00-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55
Date Source Abstract Code Observer Occurrence Data
50% in bloom.
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1990-02-19
Last Observed: 1990-02-19 ***First Observed:*** 1979-00-00 ***Precision Code:*** M
Directions: Sage Creek, Facing East.
General Description: Eroding badland slope.
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** E ***Best Source of Info:*** S79WALUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA02 Wallis, C. UA 84601 1979-00-00 Fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503
Date Source Abstract Code Observer Occurrence Data
Fruits
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1966-06-11
Last Observed: 1966-06-11 ***First Observed:*** 1966-06-11 ***Precision Code:*** M
Directions: Milk River Valley; Pendant d'Oreille.
General Description: Locally on dry slope.
Min Elev. (m): 884 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S66DEVPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66DEVPMABCA02 de Vries, B.D. PM B68.4.107 1966-06-11
S66DEVUCABCA09 de Vries, B.D. UC 27024 1966-00-00 Scattered; [just past full bloom]; uncommon
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 509773 5449484 Pendant d'oreille Lat/Long: 49 12'/ 110 52' 7 18
Date Source Abstract Code Observer Occurrence Data
Flowers
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1989-06-15
Last Observed: 1989-06-15 ***First Observed:*** 1989-06-15 ***Precision Code:*** S
Directions: Milk River NA
General Description: Slight solonetzic depressions in very short sandy grassland
Min Elev. (m): 972 ***Max Elev. (m):*** 972 ***Best Source of Info:*** S89WALPPABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA05 Wallis, C. PP 759 1989-06-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 523373 5427384 Milk River Natural Area 11 22
Date Source Abstract Code Observer Occurrence Data
Scattered plants totaling several 100s in this area
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1985-06-09
Last Observed: 1985-06-09 ***First Observed:*** 1985-06-09 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 14 km S of; Lost River, 2 km W of; USA border, 1.5 km N of.
General Description: sandy slope
Min Elev. (m): 869 ***Max Elev. (m):*** 876 ***Aspect:*** SW ***Best Source of Info:*** S85WALUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA04 Wallis, C. UA 098428 1985-06-09 Y fruits, developing
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538300 5428650 Lost River 9 8
Source Code Author Publisher Year Title
U86WER01ABCA Wershler, C.R. Prepared for AB Forestry, Lands and Wildlife 1986 Lost River: Mountain Plover Study.
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1997-05-25
Last Observed: 1997-05-25 ***First Observed:*** 1997-05-25 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Lethbridge; Oldman River Valley, E slopes of; Six Mile Coule, 1 km N of.
General Description: south side of ridgetop, near top; Stipa, Bouteloua, Koeleria, Eurotia, Penstemon
Min Elev. (m): 830 ***Max Elev. (m):*** 830 ***Aspect:*** S
Other Comments: Several location between Six Mile Coulee and Dog run area; also west side at Bull Trail Park. ***Best Source of Info:*** U97ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 367550 5503500 Lethbridge 3TM 83648.11 5505255.48; 83776.12 550 4956.70 20 3791
Source Code Author Publisher Year Title
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-05-25 U97ERN01ABCA Reg Ernst several populations; too numerous to count
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield, 32.5 km SE of; S.Sask. River, 4.25 km N of.
General Description: Population no longer exists. 1 plant found.
Min Elev. (m): 792 ***Max Elev. (m):*** 792 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 495800 5546750 S. Sask. River NE15- 8 13-8-4, LS # 44, Km 293.5 7 3975
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley and USA border, at.
General Description: eroded kame slope
Min Elev. (m): 846 ***Max Elev. (m):*** 876 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 541350 5427775 Lost River 45 4546
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, rim of; USA border, 1.8 km N of.
General Description: sandy upland grassland
Min Elev. (m): 846 ***Max Elev. (m):*** 869 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540000 5428550 Lost River 48 4549
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, W rim of, 2.7 km N of.
General Description: sandy upland grassland
Min Elev. (m): 861 ***Max Elev. (m):*** 884 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 539900 5429950 Lost River 50 4551
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Date Source Abstract Code Observer Occurrence Data
R86WER01ABCA C. Wershler & C. Wallis dense stand
Crepis occidentalis small-flowered hawk's-beard SRank: S2
++++++++++++++++++++++

Element Code: PDAST2R0E0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1990-06-19
Last Observed: 1990-06-19 ***First Observed:*** 1990-06-19 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Eagle Nest, south end of NA
General Description: in eroding soil in "badlands" ***Best Source of Info:*** N90WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 546800 5491800 Eagle Nest 60 5074
Source Code Author Publisher Year Title
N90WAL02ABCA Wallis, Cliff Alberta Forestry, Lands and Wildlife 1990 Reconnaissance Special Feature Assessment SE28 and NE21-7-3-W4
Date Source Abstract Code Observer Occurrence Data
1990-06-19 N90WAL02ABCA Cliff Wallis 30 plants
Crepis occidentalis small-flowered hawk's-beard SRank: S2

Cryptantha minima small cryptanthe

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in July
Specific Search Strategies (if any): important to have a clear understanding of differences between *Cryptantha fendleri* and *minima*. Search in actively eroding sand, concentrating on sand dunes and valley slopes in sand dune regions. Has been reported for wetland edge.

Element Occurrences:

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1973-07-22
Last Observed: 1973-07-22 ***First Observed:*** 1973-07-22 ***Precision Code:*** M
Directions: Medicine Hat, 14 mi N of; near S. boundary of DRES, Suffield Military Reserve; Bull pen area on S. Sask. River.
Min Elev. (m): 650 ***Max Elev. (m):*** 650 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73JOHPMABCA01 Johnson, H. PM B73.69.68 1973-07-22 Fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 527600 5562550 Old Channel Lake 1 168
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
Fruits
Cryptantha minima small cryptanthe SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-07-07 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; Mule Deer Road, along
General Description: disturbed sandy site in vicinity of reservoir pond - with Chenopodium pratericola, Axyris amaranthoides, Polygonum arenastrum
Min Elev. (m): 625 ***Max Elev. (m):*** 686 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA07 Macdonald, I.D. PM B94.4.527 1994-07-07 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536150 5590850 South Saskatchewan River UTM WL 536150 / 5590850 2 205
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Cryptantha minima small cryptanthe SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1894-06-00
Last Observed: 1894-06-00 ***First Observed:*** 1894-06-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Medicine Hat.
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S94MACACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACACONCA01 Macoun, John AC none 1894-06-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 523400 5542850 Medicine Hat 15 3843
Cryptantha minima small cryptanthe SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-07-26
Last Observed: 1996-07-26 ***First Observed:*** 1996-07-26 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Empress, grain elevators, between.
General Description: amongst weeds between two grain elevators, between tracks.
Min Elev. (m): 602 ***Max Elev. (m):*** 602 ***Best Source of Info:*** U97SMI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 569150 5645575 Empress 19 4860
Source Code Author Publisher Year Title
U97SMI01ABCA Smith, Bonnie COSEWIC 1997 Status Report on Species at Risk in Canada -Tiny Cryptanthe (Crypthanta minima)
Date Source Abstract Code Observer Occurrence Data
1996-07-26 U97SMI01ABCA Bonnie Smith 10-12 specimens in fruit
Cryptantha minima small cryptanthe SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1998-07-03
Last Observed: 1998-07-03 ***First Observed:*** 1998-07-03 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Old Channel Lake, 2 km ENE of; South Saskatchewan River, 0.7 km E of.
General Description: sandhills; steep eroding slope; xeric; on cattle trail in active sand
Min Elev. (m): 665 ***Max Elev. (m):*** 665 ***Aspect:*** N
Management Comments: May be eliminated by pipeline construction. ***Best Source of Info:*** U98BUS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 528850 5564300 South Saskatchewan River LSD12-02-15-5- W4M 39 5058
Source Code Author Publisher Year Title
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1998-07-03 U98BUS01ABCA Dana Bush one plant
Cryptantha minima small cryptanthe SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0A1Y0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1999-08-15
Last Observed: 1999-08-15 ***First Observed:*** 1999-08-15 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Fly Lake, 3.5 km S of; Eagle Butte, 2.5 km NE of.
General Description: along shore of stock pond; hygric
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340
Slope: 10.00 ***Aspect:*** SW
Other Comments: Specimen has been collected by R. Ernst; collector number 012. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 544700 5495950 Eagle Butte 6-8-3 W4M 64 5512
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-15 U99BRA01ABCA R. Ernst less than 20 plants; V6 vegetative; R6 reproductive
Cryptantha minima small cryptanthe SRank: S1

Cuscuta gronovii common dodder

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Shrubland
Phenology: flowers in July
Specific Search Strategies (if any): wide area searches in sagebrush and buckbrush communities; visible into late summer; has been reported in other regions on shorelines

Element Occurrences:

Element Code: PDCUS010T0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1976-07-15
Last Observed: 1976-07-15 ***First Observed:*** 1976-07-15 ***Precision Code:*** M
Directions: Medicine Hat, approx. 25 mi. N of; South Saskatchewan River, on the.
General Description: As a parasite on skeletonweed (Lygodesmia) in Artemisia cana community; on sandy uplands near the river breaks.
Min Elev. (m): 655 ***Max Elev. (m):*** 655
Other Comments: ID by John Corbin ***Best Source of Info:*** S76CORUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76CORUCABCA03 Corbin, J. & D. Jacques UC 42816 1976-07-15 Y Occasional
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 528350 5587000 Drowning Ford 50 26/110 35. 2 187
Cuscuta gronovii common dodder SRank: S1
+++++++++++++++++++++++

Element Code: PDCUS010T0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1990-08-24
Last Observed: 1990-08-24 ***First Observed:*** 1990-08-24 ***Precision Code:*** M
Directions: Bow & Oldman River, confluence of, about 2 mi. NW of.
General Description: Growing on Solidago missouriensis; other species: Oryzopsis hymenoides/Calmamovilfa longifolia/Opuntia polyacantha,
Sporobolus cryptandrus.
Min Elev. (m): 754 ***Max Elev. (m):*** 754
Other Comments: ID by K. Tannas. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 447150 5531750 The Grand Forks 4 151
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
4-5 "bunches"; flowering
Cuscuta gronovii common dodder SRank: S1
+++++++++++++++++++++++

Element Code: PDCUS010T0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1994-07-07
Last Observed: 1994-07-07 ***First Observed:*** 1994-07-07 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Mouth of Bull Springs Coulee; ~7 km NW of; S Saskatchewan River; ~200 m N of.
General Description: disturbed sandy ground in vicinity of reservoir pond, with Chenopodium pratericola, Axyris amaranthoides, Polygonum arenastrum (parasitic on Polygonum convolvulus and Axyris amaranthoides).
Min Elev. (m): 625 ***Max Elev. (m):*** 625 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA15 Macdonald, I.D. PM B94.4.529 1994-07-07 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536525 5589900 CFB Suffield 50-27'40N/110-29'15"W 25 4331
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Cuscuta gronovii common dodder SRank: S1

Cyperus schweinitzii sand nut-grass

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: heads out in late June
Specific Search Strategies (if any): visible into late summer; on coarse sands in active portion of dune

Element Occurrences:

Element Code: PMCYP06360 ***Occurrence Code #:*** 001 ***Survey Date:*** 1992-07-29
Last Observed: 1992-07-29 ***First Observed:*** 1983-07-26 ***Precision Code:*** M
Directions: Wainwright Dunes Ecological Reserve.
General Description: Well drained, south side of sand dunes.
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S92JOHCFABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83FEHAUABCA02 Fehr, A. and T. S. Bakshi AU 83-0521 1983-06-23 Y
S83FEHPPABCA06 Fehr, A. & S. Carbonneau PP 621 1983-07-26
S92JOHCFABCA03 Johnson, J.D. CF 930287 1992-07-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526400 5827450 David Lake 4 271
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 002 ***Survey Date:*** 1999-06-29
Last Observed: 1999-06-29 ***First Observed:*** 1986-07-19 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Orion, 7.5 km SW of.
General Description: protected interdune area; scattered throughout dune system although primarily in active portions with 50-70% vegetation cover with Stipa comata, Rumex venosus, Koeleria macrantha, Oryzopsis hymenoides
Min Elev. (m): 880 ***Max Elev. (m):*** 880
Management Comments: no known threats or management concerns ***Best Source of Info:*** S86HRAPMABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA06 Hrapko, J.O. & M. E. Parker PM B86.139.11 1986-07-19 fruits
S87DICAUABCA01 Dickinson, R. B. and J. O. Hrapko AU 87-1543 1987-04-26 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509500 5471550 Pakowki Lake polygon 45 5271
Source Code Author Publisher Year Title
F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)
Date Source Abstract Code Observer Occurrence Data
1999-06-29 J. Gould and P. Cotterill hundreds of plants noted throughout dune complex, just starting to flower this date
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 003 ***Survey Date:*** 1987-04-25
Last Observed: 1987-04-25 ***First Observed:*** 1976-07-23 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Orion, 5 mi SSW of.
General Description: on sparsely vegetated dune; dominated by Koeleria macrantha & Calamovilfa longifolia
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Best Source of Info:*** S87HRAPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA14 Klar, Andrew UA 81132 1976-07-23 Y spikelets
S87HRAPMABCA01 Hrapko, J.O., & R. B. Dickinson PM B87.13.4 1987-04-25 last years plants
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 512223 5469883 Pakowki Sand Dunes Lat/Long:49 23/110 50 4 85
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 004 ***Survey Date:*** 1983-06-23
Last Observed: 1983-06-23 ***First Observed:*** 1983-06-23 ***Precision Code:*** M
Directions: Hughenden, 16 km NE of; David Lake
General Description: active sandy blowout
Min Elev. (m): 610 ***Max Elev. (m):*** 680 ***Best Source of Info:*** S83FEHPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83FEHPMABCA01 Fehr, A. & S. Charbonneau PM B86.17.75 1983-06-23 remains of last years plants(includes panicle)
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 522600 5825600 Wainwright Dunes E.R. Lat/Long: 52 35/110 40 5 272
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 005 ***Survey Date:*** 1983-07-00
Last Observed: 1983-07-00 ***First Observed:*** 1983-05-00 ***Precision Code:*** S
Directions: Wainwright Study Area
General Description: Active blowout.
Min Elev. (m): 685 ***Max Elev. (m):*** 685
Slope: 45.00 ***Aspect:*** SW ***Best Source of Info:*** R84FEH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83FEHPPABCA07 Fehr, A. & S. Carbonneau PP 619 1983-06-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 523000 5827750 Wallaby Lake Vegetation plot AF83017 7 274
Source Code Author Publisher Year Title
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 006 ***Survey Date:*** 1983-07-17
Last Observed: 1983-07-17 ***First Observed:*** 1983-05-00 ***Precision Code:*** S
Directions: Wainwright; David Lake Area
General Description: Blowout in grassland
Min Elev. (m): 678 ***Max Elev. (m):*** 678 ***Best Source of Info:*** R84FEH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83FEHPPABCA05 Fehr, A. PP 620 1983-07-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 524600 5828550 David Lake Veg. plot AF 83007 35 302
Source Code Author Publisher Year Title
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory
Date Source Abstract Code Observer Occurrence Data
Rare-dry sandy soil & dunes
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 007 ***Survey Date:*** 1995-07-21
Last Observed: 1995-07-21 ***First Observed:*** 1995-07-21 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along the; Trumpeter Trail, about 1.5 km south of the eastern end of; E-facing long slope, at the base of; river level, 6 m above the normal
General Description: gently undulating,glacial fluvial terrace,hummocky aeolian sand,semiopen sandy ground,sparse litter layer, assoc. plants: Stipa com., Calamavilfa long. Agropyron dasy.Sporob.cry...
Min Elev. (m): 648 ***Max Elev. (m):*** 648 ***Aspect:*** E ***Size of Occurrence:*** 5.00
Other Comments: the second known station for this species in Alberta, marks the northwestern limit of its range, next-nearest - well to the SW of Cypress Hills.[Two UTM's - one population]
Management Comments: has not been grazed by cattle for 18 yrs. efforts being made to maintain prot. from livestock, will monitor in future ***Best Source of Info:*** U96MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95TROPMABCA01 Trottier, G. PM B95.10.11 1995-07-13 Y spikelets present
S95TROPMABCA02 Trottier, G. PM B95.10.12 1995-07-21 Y spikelets present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526800 5575050 Cottonwood Grove UTM WL 526783 / 5574990 and UTM WL 526832 / 5575110 7 192
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA, large pop, area 200m X 250 m, forming a semi-closed tall meadow with the nutgrass being the most notable species
Cyperus schweinitzii sand nut-grass SRank: S2
++++++++++++++++++++++

Element Code: PMCYP06360 ***Occurrence Code #:*** 008 ***Survey Date:*** 1993-08-00
Last Observed: 1993-08-00 ***First Observed:*** 1993-08-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Amisk, 4 km SE of; Hughenden Lake, 1.5 km N of.
General Description: well-drained open sand/blowouts; assoc. with Juniperus communis, Heterotheca villosa and Carex siccata
Min Elev. (m): 710 ***Max Elev. (m):*** 710
Other Comments: Specimen has been collected vy Cheryl Bradley. ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 499500 5821000 Hugheden Lake SW19-41-7 W4M 6 5075
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
1993-08-00 U99WIL02ABCA Cheryl Bradley more than 150 plants, healthy and fruiting
Cyperus schweinitzii sand nut-grass SRank: S2

Cyperus squarrosus awned nut-grass

Natural Region: Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: heads out in late July/August
Specific Search Strategies (if any): search slough margins where uncultivated and ungrazed.

Element Occurrences:

Element Code: PMCYP064B0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1953-08-14
Last Observed: 1953-08-14 ***First Observed:*** 1953-08-14 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Seven Persons, 4.5 km NE of; Hwy 3, on W side of.
General Description: margin of slough
Min Elev. (m): 747 ***Max Elev. (m):*** 747 ***Best Source of Info:*** S53MOSUAABCA41
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53MOSUAABCA41 Moss, E.H. UA 35749 1953-08-14 Y spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 509125 5528600 Seven Persons 27 4470
Cyperus squarrosus awned nut-grass SRank: S1

Downingia laeta downingia

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers mid-June to mid-July
Specific Search Strategies (if any): visible into August; basins of sandy wetlands that have been exundated.

Element Occurrences:

Element Code: PDCAM06080 ***Occurrence Code #:*** 001 ***Survey Date:*** 1952-08-28
Last Observed: 1952-08-28 ***First Observed:*** 1952-08-28 ***Precision Code:*** M
Directions: Foremost, 2 mi S of.
General Description: Roadside ditch, near slough
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S52MOSUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52MOSUAABCA06 Moss, E.H. UA 16350 1952-08-28 Flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E06 12 468550 5475800 Foremost 1 79
Downingia laeta downingia SRank: S1S2
++++++++++++++++++++++

Element Code: PDCAM06080 ***Occurrence Code #:*** 002 ***Survey Date:*** 1979-07-31
Last Observed: 1979-07-31 ***First Observed:*** 1979-07-31 ***Precision Code:*** S
Directions: Near centre of quarter.
General Description: Lake bottom normally submerged, now water receeded and area exposed in a mud flat.
Min Elev. (m): 968 ***Max Elev. (m):*** 968 ***Best Source of Info:*** S79SKOALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79SKOALABCA01 Skoglund AL 5160 1979-07-31
S79SKOULABCA01 Skoglund UL none 1979-07-31
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 353250 5536450 Keho Lake 2 1392
Downingia laeta downingia SRank: S1S2
++++++++++++++++++++++

Element Code: PDCAM06080 ***Occurrence Code #:*** 003 ***Survey Date:*** 1978-07-10
Last Observed: 1978-07-10 ***First Observed:*** 1978-07-10 ***Precision Code:*** S
Directions: Lethbridge, S of; St. Mary's River & Pothole Creek, near confluence of.
General Description: Oxbow slough
Min Elev. (m): 860 ***Max Elev. (m):*** 860 ***Best Source of Info:*** S78KUIULABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78KUIULABCA03 Kuijt, J. & D. Coxson UL none 1978-07-10
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 367800 5491650 Lethbridge 5 1356
Downingia laeta downingia SRank: S1S2
++++++++++++++++++++++

Element Code: PDCAM06080 ***Occurrence Code #:*** 004 ***Survey Date:*** 1989-07-15
Last Observed: 1989-07-15 ***First Observed:*** 1989-07-15 ***Precision Code:*** M
Directions: Kinbrook Island Provincial park
General Description: Shoreline; level depression
Min Elev. (m): 768 ***Max Elev. (m):*** 768
Other Comments: Additional specimen housed at East Slope Rangeland Consultants herbarium (private collection) Det K. Tannas (UNDTAN01ABCA).
Management Comments: A more complete study of the area should be undertaken, as little time was spent there. ***Best Source of Info:*** S89TANPPABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89TANPPABCA01 Tannas, KE & CA PP 751 1989-07-15 Rare
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L05 12 435400 5588750 Kinbrook Island Provincial Park 1 183
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
a few sporadically occurring individuals, flowering(UNDTAN01ABCA)
Downingia laeta downingia SRank: S1S2

Element Code: PDCAM06080 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hwy 48; 2.7km W of; Rd to Onefour; 150m S of.
General Description: 10 plants on RoW. At least 20 more off RoW. Wetland in Robinson's Coulee.Special construction techniques used to protect wetland. Populations avoided on either side of RoW.
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Aspect:*** N
Other Comments: UTM:516327.14-516159.94E;5522005.96-5522284.28N ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 516336 5521991 Fitzgerald NE 9-29- 10-6-4, Km 326.8 & Km 327.1, LS #49;/LS#005;km:327.1;LLD:NE 2910-6-4 10 3972
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Downingia laeta downingia SRank: S1S2
++++++++++++++++++++++

Element Code: PDCAM06080 ***Occurrence Code #:*** 006 ***Survey Date:*** 1986-06-11
Last Observed: 1986-06-11 ***First Observed:*** 1986-06-11 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Near NE shore of Pakowki Lake; SW of Orion.
General Description: with Plagiobothrys scouleri in moist grass-dominated area below low dam
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Best Source of Info:*** S86HRAPMABCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA13 Hrapko, J.O., Richards, W.M., Dickinson, R.B. PM B86.127.67 1986-06-11 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Downingia laeta downingia SRank: S1S2
++++++++++++++++++++++

Element Code: PDCAM06080 ***Occurrence Code #:*** 007 ***Survey Date:*** 1999-08-09
Last Observed: 1999-08-09 ***First Observed:*** 1999-08-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: SW of Beaver Mines (hamlet); along SH 774; Beaver Mines Lake, 4.5 km due N of; N side of road.
General Description: roadside ditch, where cattle herded through; wet; with Beck syz, Junc buf, Eleocharis sp. Plag sco, Trif pra
Min Elev. (m): 1435 ***Max Elev. (m):*** 1435
Slope: 0.00
Other Comments: Slide taken
Management Comments: Cattle present - cannot be protected. ***Best Source of Info:*** U99COR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 696650 5477350 Beaver Mines Lake 29 5200
Source Code Author Publisher Year Title
U99COR01ABCA Corbiere, Adrian 1999 Rare Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1999-08-09 U99COR01ABCA A. Corbiere, B. Sharp, L. Hutchinson 100's of plants; 90% adults; 50% flowering
Downingia laeta downingia SRank: S1S2

Draba reptans whitlow-grass

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: late April to May
Specific Search Strategies (if any): search sandy/gravelly bare patches on slopes and adjacent valley bottoms; detectable well after the flowering season but very sparse populations means some hands and knees searching

Element Occurrences:

Element Code: PDBRA11270 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-07-14
Last Observed: 1986-07-14 ***First Observed:*** 1986-07-14 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
General Description: alluvial plain; little vegetative cover, associated with Stipa comata-Agropyron dasystachyum-Poa spp.
Min Elev. (m): 1080 ***Max Elev. (m):*** 1080 ***Size of Occurrence:*** 1.00
Management Comments: Near location of proposed dam. ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 402400 5444300 Milk River 2 912
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
I86WAL04ABCA Wallis, C. 1986
I86WAL05ABCA Wallis, C. 1986
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
Solitary plant(B86WAL01ABCA)
Draba reptans whitlow-grass SRank: S1
++++++++++++++++++++++

Element Code: PDBRA11270 ***Occurrence Code #:*** 002 ***Survey Date:*** 1934-04-22
Last Observed: 1934-04-22 ***First Observed:*** 1934-04-22 ***Precision Code:*** G
General Description: gravelly ground, garden
Min Elev. (m): 950 ***Max Elev. (m):*** 950
Other Comments: Cultivated. ***Best Source of Info:*** S34DIXUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S34DIXUAABCA01 Dixon, R.H. UA 9780 1934-04-22 [flowers, fruits]
S41DIXACONCA01 Dixon, R.H. AC none 1941-05-04
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 327000 5511000 Fort MacLeod 2 1369
Draba reptans whitlow-grass SRank: S1
++++++++++++++++++++++

Element Code: PDBRA11270 ***Occurrence Code #:*** 004 ***Survey Date:*** 1986-07-05
Last Observed: 1986-07-05 ***First Observed:*** 1986-07-05 ***Precision Code:*** M
Directions: Turin, 10 km S of; go along trail between sec 8&9, through gate & S until first blowout 3 m E of trail, site is just W of trail.
General Description: Grassland on dry sandy or gravelly soil, often where disturbed or eroding.
Min Elev. (m): 853 ***Max Elev. (m):*** 875 ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 388250 5526600 Turin Dunes 1 1398
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Draba reptans whitlow-grass SRank: S1
++++++++++++++++++++++

Element Code: PDBRA11270 ***Occurrence Code #:*** 005 ***Survey Date:*** 1987-04-19
Last Observed: 1987-04-19 ***First Observed:*** 1987-04-19 ***Precision Code:*** M
Directions: Lethbridge.
General Description: Valley bottom grassland, well drained.
Min Elev. (m): 850 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S87HALCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87HALCFABCA01 Hall, E. CF 870128 1987-04-19 Flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 368500 5502500 Six Miles Coulee 2 1353
Draba reptans whitlow-grass SRank: S1

Element Code: PDBRA11270 ***Occurrence Code #:*** 006 ***Survey Date:*** 1995-06-23
Last Observed: 1995-06-23 ***First Observed:*** 1995-06-23 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Canadian Forces Base Suffeld National Wildlife Area; Linstead Flats, about 5 km E of (from Hamilolobis virgata 001)
General Description: subxeric sites; prairie grassland on a gently rolling sandy ground moraine plain; in association with Hamilolobis virgata [EO001 -in an area of 15 X 25 m](prov. rare); very rare
Min Elev. (m): 715 ***Max Elev. (m):*** 715
Management Comments: threatened from cultivation of sandy soil areas & by stabilization of loose sand by denser vegetation cover. ***Best Source of Info:*** S95MACPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA03 Macdonald, I.D. PM B95.9.5 1995-06-23 Y remains of fruits; very rare
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 539000 5597000 Middle Sand Hills UTM WL 539000 / 5597000; 50 31 28/110 26 15 2 216
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA
Draba reptans whitlow-grass SRank: S1

Elatine triandra waterwort

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland
Phenology: detectable from early June on
Specific Search Strategies (if any): shallow ephemeral wetlands, perhaps sandy; search in open water rooted in bottom

Element Occurrences:

Element Code: PDELT02090 ***Occurrence Code #:*** 001 ***Survey Date:*** 1973-06-02
Last Observed: 1973-06-02 ***First Observed:*** 1973-06-02 ***Precision Code:*** S
Directions: Long Lake Provincial Park
General Description: Flat lakeshore; sedges & cattails; density & distribution may change somewhat with lake level; organic soil
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** R73FRI02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83I07 12 386600 6031200 Long Lake Provincial Park Map 1 reference #49 1 3390
Source Code Author Publisher Year Title
M73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 Long Lake Ecological Survey 1973 Maps
R73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincal Park vol. 1
R73FRI02ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincal Park vol. 2
R92PAT01ABCA Patriquin, D.L. and R.A. Ellis 1992 An Assessment of the Significant Features of the Amisk Valley
Date Source Abstract Code Observer Occurrence Data
25-50% coverage; ht 3"
Elatine triandra waterwort SRank: S1
+++++++++++++++++++++++

Element Code: PDELT02090 ***Occurrence Code #:*** 002 ***Survey Date:*** 1973-08-13
Last Observed: 1992-00-00 ***First Observed:*** 1973-08-13 ***Precision Code:*** S
Directions: Long Lake Provincial Park
General Description: Flat sedge marsh; submerged to wet organic soil; Largest marsh in the park.
Min Elev. (m): 655 ***Max Elev. (m):*** 655 ***Best Source of Info:*** R73FRI02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83I07 12 386250 6035850 Long Lake Provincial Park Map 1 reference #280 2 3391
Source Code Author Publisher Year Title
M73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 Long Lake Ecological Survey 1973 Maps
R73FRI01ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincal Park vol. 1
R73FRI02ABCA Friesen, R.D. & S. Schaafsma 1973 An Ecological Study of Long Lake Provincal Park vol. 2
R92PAT01ABCA Patriquin, D.L. and R.A. Ellis 1992 An Assessment of the Significant Features of the Amisk Valley
Date Source Abstract Code Observer Occurrence Data
0-1" tall; 25-50% coverage
Elatine triandra waterwort SRank: S1
+++++++++++++++++++++++

Element Code: PDELT02090 ***Occurrence Code #:*** 003 ***Survey Date:*** 1997-07-09
Last Observed: 1997-07-09 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Sculer, 13 km NW of; Hwy 41, 8.5 km W of.
General Description: Wetland within mixed grass-prairie area. Polygonum coccineum- Alopecurs aequalis--Carex retrorsa-Eleocharis palustris, also present Oxalis , Lila sci
Min Elev. (m): 808 ***Max Elev. (m):*** 808
Other Comments: Wetland appears to be a catch basin for seasonal run-off.
Management Comments: Livestock grazing; the population is not in the area of a proposed pipeline. Population is not threatened.
Best Source of Info: U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
Date Source Abstract Code Observer Occurrence Data
1997-07-09 U97AXY03ABCA Kathy Tannas vegetative; adults; flowers and fruits
1997-07-29 U97AXYO3ABCA Kathy Tannas 493 individuals, vegetative; adults; flowering; fruiting
Elatine triandra waterwort SRank: S1

Eleocharis engelmannii Engelmann's spike-rush
= *E. ovata*

Natural Region: Mixedgrass
Habitat: Wetland
Phenology: heads out in late July
Specific Search Strategies (if any): not all dots in Moss are in the ANHIC database. Taxonomic difficulties.

Element Occurrences:

Element Code: PMCYP090M0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1990-08-11
Last Observed: 1990-08-11 ***First Observed:*** 1990-08-11 ***Precision Code:*** S
Directions: Canmore Flats Natural Area
General Description: Closed depression in braided bar of Bow River. Carex-Eleocharis dominated
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310 ***Best Source of Info:*** S90TIMPPABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90TIMPPABCA07 Timoney, K. PP 622 1990-08-11 Rare
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O03 11 619000 5657000 Canmore Flats Natural Area Photo: K09P11; LSD 4 56 1934
Eleocharis engelmannii Engelmann's spike-rush SRank: S1?

Ellisia nyctelea waterpod

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowers in June
Specific Search Strategies (if any): search in on sandy slopes, especially in buckbrush; responds favorably to fire; most often on open disturbed ground both along stream beds and on slopes; evanescent and not very visible after flowering

Element Occurrences:

Element Code: PDHYD02010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1939-07-02
Last Observed: 1939-07-02 ***First Observed:*** 1930-06-15 ***Precision Code:*** G
Directions: Macleod; hillside
General Description: rich soil
Min Elev. (m): 950 ***Max Elev. (m):*** 950
Other Comments: U of A duplicate; accepted Moss's I.D. ***Best Source of Info:*** S30DIXUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S30DIXUAABCA03 Dixon, R.H. UA 14710 1930-06-15 Y [flowers, fruits]
S30DIXUCABCA01 Dixon, R.H. UC 21991 1930-06-15 Y fruiting
S39DIXUCABCA01 Dixon, R.H. UC 21991 1939-07-02 Y fruiting
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 327000 5511000 Fort MacLeod 2 1369
Ellisia nyctelea waterpod SRank: S2
+++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1941-06-30
Last Observed: 1941-06-30 ***First Observed:*** 1941-06-30 ***Precision Code:*** M
Directions: Handhills district; Fish Lake, W end of
General Description: sandy soil, old creek bed
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S41BRIUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S41BRIACONCA01 Brinkman, A.H. AC none 1941-06-30
S41BRIUAABCA01 Brinkman, A.H. UA 63349 1941-06-30 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 412000 5694100 Little Fish Lake 6 2290
Ellisia nyctelea waterpod SRank: S2
+++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1951-05-25
Last Observed: 1951-05-25 ***First Observed:*** 1951-05-25 ***Precision Code:*** M
Directions: Lethbridge, Vet. Res. Station.
General Description: waste ground in river valley.
Min Elev. (m): 870 ***Max Elev. (m):*** 870 ***Best Source of Info:*** S51SEXUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51SEXALABCA01 Sexsmith, J.J. AL 4706 1951-05-25 Y
S51SEXUAABCA01 Sexsmith, J.J. UA 14711 1951-05-25 Y buds, one flower
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 357000 5509000 Lethbridge Research Station 12 1363
Ellisia nyctelea waterpod SRank: S2
+++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1949-06-04
Last Observed: 1949-06-04 ***First Observed:*** 1945-06-23 ***Precision Code:*** M
Directions: Calgary, NW of; Nose Hill
General Description: bottom of shallow ravine; among low shrubs, heavily shaded by Symphorrcarpos occidentalis.
Min Elev. (m): 1226 ***Max Elev. (m):*** 1226
Other Comments: [same location as collns 8682, 8682a and 9621] ***Best Source of Info:*** S49MCCUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45MCCUAABCA11 McCalla, W. C. UA 63911 1945-06-23 Y [flowers]
S45MCCUAABCA12 McCalla, W. C. UA 63911 1945-07-23 Y [fruits]
S45MCCUCABCA01 McCalla, W.C. UC 21990 1945-07-23 Y
S45MCCUCABCA02 McCalla, W.C. UC 21990 1945-07-23 Y
S47MCCUAABCA02 McCalla, W.C. UA 63912 1947-06-11 Y flowers, predominantly
S49MCCUAABCA03 McCalla, W.C. UA 63909 1949-06-04 Y flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 702000 5666675 Calgary - Nosehill 29 1878
Ellisia nyctelea waterpod SRank: S2
++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1985-05-26
Last Observed: 1985-05-26 ***First Observed:*** 1985-05-26 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Dry Island - Buffalo Jump P.P.
General Description: Locally common in loose, sandy bone-laden soil at foot of escarpment with Descurainia sophia.
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S85POSUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85POSUCABCA01 Posey, J. B. UC 50171 1985-05-26 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P15 12 366000 5756000 Dry Island Buffalo Jump Provincial Park 2 2297
Ellisia nyctelea waterpod SRank: S2
++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1975-07-02
Last Observed: 1975-07-02 ***First Observed:*** 1968-06-20 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Agriculture Canada - Stavely Sub-Station.
General Description: In plots and along nursery east fence; cultivated soil and disturbed ground
Min Elev. (m): 1372 ***Max Elev. (m):*** 1372 ***Best Source of Info:*** S75BOHALABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68ALLALABCA09 Allen, T. D. AL 2227 1968-06-20 Y
S75BOHALABCA03 Bohus, G. AL 3240 1975-07-02 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I04 12 294325 5563350 Oxley Creek 1 1410
Ellisia nyctelea waterpod SRank: S2
++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1962-05-24
Last Observed: 1962-05-24 ***First Observed:*** 1962-05-24 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Warner, 5 mi. N of.
General Description: Moist, saline meadow.
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Best Source of Info:*** S62SEXALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S62SEXACONCA01 Sexsmith, J.J. AC none 1962-05-24
S62SEXALABCA02 Sexsmith, J.J. AL none 1962-05-24 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H08 12 412900 5467650 Warner 1 1347
Ellisia nyctelea waterpod SRank: S2
++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 008 ***Survey Date:*** 1958-06-27
Last Observed: 1958-06-27 ***First Observed:*** 1958-06-27 ***Actual Mapping Precision (m):*** 300 ***Precision Code:*** M
Directions: Writing-on-Stone Provincial Park
General Description: Fruticetum sur les platieres de la riviere de Lait.
Min Elev. (m): 915 ***Max Elev. (m):*** 915 ***Best Source of Info:*** S58BOIACONCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58BOIACONCA04 Boivin, B & J.-M. Perron AC 129108 1958-06-27
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55
Ellisia nyctelea waterpod SRank: S2
++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 009 ***Survey Date:*** 1999-06-04
Last Observed: 1999-06-04 ***First Observed:*** 1999-06-04 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Lethbridge; Oldman River Valley; Mountainview Cemetary, 500 m W of; Lethbridge Golf and Country Club, 200 m E of.
General Description: Symph occ, Poa prat shrubland on lower slope of coulee; Thlac arv and Brass spp. also present; mesic
Min Elev. (m): 870 ***Max Elev. (m):*** 890
Slope: 10.00 ***Aspect:*** SW
Other Comments: specimen was collected and to be housed at the U of A Herbarium ***Best Source of Info:*** U99SHA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 367500 5503850 Lethbridge 1 1352
Source Code Author Publisher Year Title
U99SHA01ABCA Sharp, Bill, Reg Ernst and Cheryl Bradley 1999 Rare Native Plant Report Form
Date Source Abstract Code Observer Occurrence Data
1999-06-04 U99SHA01ABCA Bill Sharp, Reg Erust, and Cheryl Bradley < 25 plants in 100 m squared; V6 R6
Ellisia nyctelea waterpod SRank: S2
+++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 010 ***Survey Date:*** 1999-07-16
Last Observed: 1999-07-16 ***First Observed:*** 1999-07-16 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Ressor Lake, N side of.
General Description: in Crat dou(?)/Hera lan-Urti gra-Viol can shrub (5 m tall) thicket, along shallow dranage at mid-slope; mesic well drained
Min Elev. (m): 1250 ***Max Elev. (m):*** 1250
Slope: 19.00 ***Aspect:*** S ***Size of Occurrence:*** 0.04
Other Comments: Specimen has been collected, collection number WM0001; PLOT CB9001
Management Comments: livestock grazing, recreation; some invasive by non-native species (Arct min); difficult for livestock to access ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 564725 5501750 Ressor Lake 67 5516
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-16 U99BRA01ABCA Wynne Miles & Cheryl Bradley only 1 plant found in 400 m2 plot; V6 vegetative; R10 reproductive
Ellisia nyctelea waterpod SRank: S2
+++++++++++++++++++++++

Element Code: PDHYD02010 ***Occurrence Code #:*** 011 ***Survey Date:*** 1999-07-16
Last Observed: 1999-07-16 ***First Observed:*** 1999-07-16 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Ressor Lake, 3 km E of; Battle Creek, N side of.
General Description: Crat ou/Urti gra-Hier lan-Viol can shrub (5-6 m tall) thicket on S-facing slope above creek; mesic well drained
Min Elev. (m): 1225 ***Max Elev. (m):*** 1225
Slope: 12.00 ***Aspect:*** S
Other Comments: PLOT CB9002
Management Comments: livestock grazing and recreation ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 568500 5501350 Battle Creek 70 5519
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-16 U99BRA01ABCA Chery Bradley & Wynne Miles 11 plants in 400 m2 plot; V6 vegetative; R10 vegetative
Ellisia nyctelea waterpod SRank: S2

Elodea bifoliata

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland
Phenology: visible from May onwards; most well-developed in August
Specific Search Strategies (if any): clear quiet waters where the water is quite shallow (less than 20 cm deep) and where the substrate is coarse (gravelys)

Element Occurrences:

Element Code: PMHYD03010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1973-08-16
Last Observed: 1973-08-16 ***First Observed:*** 1973-08-16 ***Precision Code:*** M
Directions: Calgary; Inglewood Bird Sanctuary, at.
General Description: In lagoon.
Min Elev. (m): 1020 ***Max Elev. (m):*** 1020 ***Best Source of Info:*** S73PINUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73PINUCABCA01 Pinel, H.W. UC 01683 1973-08-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 709800 5656700 Iglewood Bird Sanctuary 23 1872
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1955-09-04
Last Observed: 1955-09-04 ***First Observed:*** 1955-09-04 ***Precision Code:*** M
Directions: Vauxhall, E of; Hays. W of; large lake, entrance to
General Description: entrance to large lake; slow moving water; Hays - 50 06/111 48; Vauxhall - 50 04/112 09
Min Elev. (m): 769 ***Max Elev. (m):*** 769 ***Best Source of Info:*** S55MOSUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S55MOSUAABCA05 Moss, E.H. UA 1028 1955-09-04 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L04 12 433625 5549850 Hays 3 182
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1979-06-00
Last Observed: 1979-06-00 ***First Observed:*** 1958-07-13 ***Precision Code:*** M
Directions: Onoway, 5 km E of; Matchayaw Lake (Devil's Lake); Sturgeon River Valley
General Description: plants on sand bottom; 53 43N/114 07W
Min Elev. (m): 685 ***Max Elev. (m):*** 701 ***Best Source of Info:*** S79ALLUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58PEGPMABCA02 Pegg, George R. PM B88.1.905 1958-07-13 Y flower bud? probably male
S58PEGUAABCA01 Pegg, George UA 1029 1958-07-13 Y flower buds
S76GORUAABCA01 Gorham, P.R. UA 56338 1976-07-25 Y
S76GORUAABCA02 Gorham, P.R. UA 56342 1976-07-25
S76GORUAABCA03 Gorham, P.R. UA 56339 1976-07-25 flowers, bud - female
S79ALLUAABCA01 Allen, Dale UA 81598 1979-06-00 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G09 11 691175 5955800 Matchayaw Lake 12 3123
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1958-08-18
Last Observed: 1958-08-18 ***First Observed:*** 1958-08-18 ***Precision Code:*** M
Directions: Onoway, NW of; Sturgeon River
Min Elev. (m): 716 ***Max Elev. (m):*** 731 ***Best Source of Info:*** S58PEGUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58PEGPMABCA03 Pegg, George R. PM B88.1.908 1958-08-18 Y flower bud? - probably female
S58PEGUAABCA02 Pegg, George UA 1030 1958-08-18 Y flower
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G09 11 679500 5958000 Sturgeon River 13 3124
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1979-05-09
Last Observed: 1979-05-09 ***First Observed:*** 1976-05-21 ***Precision Code:*** M
Directions: Wabamun Lake
General Description: on marl sediment adjacent to thermal discharge from Wabamun generating station; 1.5-4.5 m deep; with Potamogeton pectinatus, P. richardsonii, P. zosteriformes, Myriophyllum exalbescens
Min Elev. (m): 728 ***Max Elev. (m):*** 728 ***Best Source of Info:*** S79HAAUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76HAAUAABCA01 Haag, R. UA 81575 1976-05-21 Y buds - flowers male
S79HAAUAABCA01 Haag, R. UA 81572 1979-05-09 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G09 11 666950 5936500 Point Alison 14 3125
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1971-06-29
Last Observed: 1971-06-29 ***First Observed:*** 1971-06-29 ***Precision Code:*** M
Directions: Isle Lake, W end of
Min Elev. (m): 730 ***Max Elev. (m):*** 730 ***Best Source of Info:*** S71ALLUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71ALLUAABCA01 Allen, E. Dale UA 50640 1971-06-29 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G10 11 644000 5941000 Isle Lake 18 3141
Elodea bifoliata SRank: S1
+++++++++++++++++++++++

Element Code: PMHYD03010 ***Occurrence Code #:*** 007 ***Survey Date:*** 2000-09-14
Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 150 ***Precision Code:*** S
Directions: Calgary; Fairview area, E of ; Bow River, W side of; Cominco Lands
General Description: shallow water/exposed shore occurs in the north-central portion of the property W of Deerfoot Trail at the western end of the canal
Min Elev. (m): 1010 ***Max Elev. (m):*** 1020
Other Comments: several hundred plants NAD27 707915E 5651927N; specimen collected; plants appear to be localized here due to the gravelly-silt substrate and relatively gentle slope compared to other parts of the canal; ***Best Source of Info:*** U00WAL04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 707915 5651927 Calgary 23 6305
Source Code Author Publisher Year Title
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary
Elodea bifoliata SRank: S1

Elymus virginicus **Virginia wild rye**

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Dry Mixedgrass
Habitat: Woodland-Sandy
Phenology: heads out in July
Specific Search Strategies (if any): most visible late July and August; extensive searches in suitable sandy/gravelly woodlands; while there have been records from riparian woodlands; sandy woodlands in coulees seem to be the most reliable habitat in which to find this species

Element Occurrences:

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1979-08-13
Last Observed: 1979-08-13 ***First Observed:*** 1979-08-13 ***Precision Code:*** S
Directions: Bow River, approximately 1 km upstream of Carseland Dam on North side of Bow River
General Description: alluvial flat-mesic-balsam poplar-tall shrub-riparian woodland; Associated spp. Poa palustris, Agropyron caninum, Aster laevis
Min Elev. (m): 907 ***Max Elev. (m):*** 907 ***Best Source of Info:*** S79BRAUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79BRAUAABCA06 Bradley, C. UA 84155 1979-08-13 Y spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I14 12 326550 5633200 Carseland 2 1427
Elymus virginicus Virginia wild rye SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1977-08-19
Last Observed: 1977-08-19 ***First Observed:*** 1977-08-19 ***Precision Code:*** M
Directions: Cavendish, 8 miles north of
General Description: manitoba maple woodland
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** S77BRAUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA05 Bradley, C. & C. Wallis UA 75365 1977-08-19 Y remains of spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 538875 5642475 Cavendish 6 253
Elymus virginicus Virginia wild rye SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1974-08-13
Last Observed: 1974-08-13 ***First Observed:*** 1974-08-13 ***Precision Code:*** M
Directions: Crowsnest Pass, near the summit of
General Description: on bedrock; in IP, wS/Vaccinium community. Assoc. spp. include Vaccinium scoparium, Aster conspicuus, Thalictrum occidentale
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585
Slope: 5.00 ***Aspect:*** E ***Best Source of Info:*** S74REIUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74REIUAABCA03 Reid, Calder, Pollock UA 76038 1974-08-13 Y Rare; spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G10 11 668000 5500800 Crowsnest Ridge 49 39/114 40 30 868
Elymus virginicus Virginia wild rye SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1977-08-18
Last Observed: 1977-08-18 ***First Observed:*** 1977-08-18 ***Precision Code:*** M
Directions: Patricia, 11 miles north of
General Description: in coulee; aspen woodland
Min Elev. (m): 640 ***Max Elev. (m):*** 640 ***Best Source of Info:*** S77WALUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77WALUAABCA01 Wallis, C. UA 75366 1977-08-18 Y remains of spikelet
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 451000 5634000 Red Deer River 6 245
Date Source Abstract Code Observer Occurrence Data
remains of spikelet
Elymus virginicus Virginia wild rye SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1976-07-18
Last Observed: 1976-07-18 ***First Observed:*** 1976-07-18 ***Precision Code:*** M
Directions: Writing-on-Stone Provincial Park
General Description: near and under trees
Min Elev. (m): 915 ***Max Elev. (m):*** 915
Other Comments: identified by S. Smoliak and R. Gschaid; verified by M. Barkworth ***Best Source of Info:*** S76GSCALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76GSCALABCA01 Gschaid family AL 3441 1976-07-18 Y headed
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55
Elymus virginicus Virginia wild rye SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M
General Description: coulees along valley of S. Sask. R.; moist woodland at edge of slightly saline springs
Min Elev. (m): 640 ***Max Elev. (m):***
Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells
Management Comments: heavy cattle grazing at one spring; petroleum dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Elymus virginicus Virginia wild rye SRank: S1
+++++++++++++++++++++++

Element Code: PMPOA2H0M0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bindloss, W of; Dune Point Springs; N side of Red Deer River; Tp23-R3-4-W4M
General Description: coulees with springs, along river valley; abundant in Acer negundo woodland
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Other Comments: recommend continue to protect springs & groundwater sources; no groundwater pumping close to basin
Management Comments: current mgmt practice consistent with protection of springs, i.e. no cattle grazing or groundwater withdrawal ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house
Elymus virginicus Virginia wild rye SRank: S1

Erigeron radicatus dwarf fleabane

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers late May to early June in grassland regions
Specific Search Strategies (if any): sandstone gravel pavement and eroding gravels along valley rims, both north and south-facing aspects; easily detectable and quite often in significant patches

Element Occurrences:

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1974-07-19
Last Observed: 1974-07-19 ***First Observed:*** 1974-07-19 ***Precision Code:*** S
Directions: Rocky Mountain House, W of; Strachan R. between N.Ram and N.Saska. Rivers; Nordegg, SW of; Ram Mountain Lookout, below tower
General Description: Scree slope
Min Elev. (m): 1980 ***Max Elev. (m):*** 1980
Other Comments: Specimen det. by G.W.Douglas ***Best Source of Info:*** R75JOH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74DUMUAABCA04 Dumais, M.G. UA 72685 1974-07-19 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83B05 11 583900 5800000 Ram Mountain Lookout Site 4 (see attached copy of Fig.11, Map in R75JOH01ABCA. 6 2351
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
R75JOH01ABCA Johnson, John Derek Master's thesis University of Calgary 1975 An evaluation of the summer range of bighorn sheep (Ovis canadensis canadensis Shaw) on Ram Mountain, Alberta
Date Source Abstract Code Observer Occurrence Data
[flowers](S74DUMUAABCA04)
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1993-07-10
Last Observed: 1993-07-10 ***First Observed:*** 1971-07-12 ***Precision Code:*** S
Directions: Ram Mountain Lookout
General Description: Alpine, sloping meadows w/ widely scatt. White Spruce, giving way to talus slopes; on or around timberline.
Min Elev. (m): 1076 ***Max Elev. (m):*** 2160
Other Comments: Observation were made in areas B, containg sites 1, 2, 3, 5, 10 & 11 of D.Johnson's map, Fig. 11, p. 39. (F93SMI01ABCA0 ***Best Source of Info:*** R75JOH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71BIRUCABCA02 Bird, C.D. UC 27430 1971-07-12 [flowers]
S74JOHUCABCA03 Johnson, J.D. UC 27429 1974-07-03 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83B05 11 582750 5800900 Ram Mountain Lookout 52 21N/115 47W 7 2352
Source Code Author Publisher Year Title
F93SMI01ABCA Smith, Darrell and Lorna Allen 1993 Species list - alpine meadows - Ram Mountain; field notes from July 10, 1993 field trip R75JOH01ABCA Johnson, John Derek Master's thesis University of Calgary 1975 An evaluation of the summer range of bighorn sheep (Ovis canadensis canadensis Shaw) on Ram Mountain, Alberta
Date Source Abstract Code Observer Occurrence Data
[flowers](S71BIRUCABCA02; S74JOHUCABCA03)
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1957-08-21
Last Observed: 1957-08-21 ***First Observed:*** 1957-08-21 ***Precision Code:*** S
Directions: Shunda Mountain; Nordegg; N of
General Description: summit & upper slopes; rare on alpine scree
Min Elev. (m): 2040 ***Max Elev. (m):*** 2040
Other Comments: Det. by J.G.Packer, stetted by G.W.Douglas ***Best Source of Info:*** S57PORNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S57PORNMONCA01 Porsild, A.E. NM 290434 1957-08-21 GWD Rare
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C09 11 559300 5820300 Shunda Mountain 52 32/116 08. Site A910 6 2531
Date Source Abstract Code Observer Occurrence Data
Rare
Erigeron radicatus dwarf fleabane SRank: S2

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1979-06-05
Last Observed: 1979-06-05 ***First Observed:*** 1979-06-05 ***Precision Code:*** S
Directions: Black Mtn., W Facing Ridge
General Description: Grassland in Limber Pine - Douglas Fir woods
Min Elev. (m): 1524 ***Max Elev. (m):*** 1524 ***Aspect:*** W
Other Comments: Det. by C. Wallis ***Best Source of Info:*** S79WALUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA01 Wallis, C. UA 84662 1979-06-05 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 702550 5537500 Black Mountain 16 889
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
[flowers]
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-07-15
Last Observed: 1997-07-15 ***First Observed:*** 1981-07-02 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Prospect Creek above; Cheviot Mt., below.
General Description: Dry alpine fell-field with Astragalus vexilliflexus, Hedysarum alpinum, Erigeron spp.
Min Elev. (m): 2080 ***Max Elev. (m):*** 2080 ***Aspect:*** SW
Other Comments: ID of Dinwoodie photo confirmed by J. Gould, 1997-07-22. ***Best Source of Info:*** PNDDIN01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S81PACUAABCA01 Packer, J.G. UA 90417 1981-07-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C14 11 476075 5863900 Prospect Creek 3 2657
Source Code Author Publisher Year Title
UNDDIN01ABCA Dinwoodie, Allison 1997
Date Source Abstract Code Observer Occurrence Data
chromosome number 2N=36 1997-07-15 UNDDIN01ABCA Allison Dinwoodie 3 individuals all flowering
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1976-07-08
Last Observed: 1976-07-08 ***First Observed:*** 1968-07-07 ***Precision Code:*** S
Directions: Cadomin; 52 56 117 22
General Description: growing in vicinity of E. pallens; dry, slope on open stony, alpine ridge
Min Elev. (m): 2010 ***Max Elev. (m):*** 2010
Other Comments: Det. by George Pegg; duplicate sheet exists #B88.1.1827
Management Comments: [Close to boundary of NA] ***Best Source of Info:*** S68PEGPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68PEGPMABCA02 Pegg, G. PM B71.3.15 1968-07-07
S71PACUAABCA05 Packer, J.G. UA 91131 1971-07-15 [flowers, fruits]
S76MORUAABCA03 Mortimer, P. UA 75219 1976-07-08 Rare and not seen elsewhere; [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C14 11 475100 5864150 Prospect Creek 47 2675
Date Source Abstract Code Observer Occurrence Data
Rare and not seen elsewhere,[flowers](S76MORUAABCA03); [flowers, fruits](S71PACUAABCA05)
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1971-07-24
Last Observed: 1971-07-24 ***First Observed:*** 1971-07-24 ***Precision Code:*** S
Directions: Waterton Lakes N.P.; Sofa Mountain, small cirque in middle of north face.
General Description: rocky valley floor
Min Elev. (m): 1890 ***Max Elev. (m):*** 1890
Other Comments: Det Job Kuijt - E. ochroleucus; annot. by Cronquist, March 78 - E. radicatus. "very characteristic" ***Best Source of Info:*** S71KUIULABCA17
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71KUIULABCA17 Kuijt, J. & M. Gadd UL none 1971-07-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 295900 5435200 Sofa Mountain 49 02/114 48 35 1007
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1990-05-27
Last Observed: 1990-05-27 ***First Observed:*** 1987-05-30 ***Precision Code:*** M
Directions: Whiskey Gap, Sommerfeldt Ranch.
General Description: dry hilltop; rough fescue grassland
Min Elev. (m): 1280 ***Max Elev. (m):*** 1400
Other Comments: Det. by J.D. Johnson; verif. by C.W.Compton, 1989, with note: "This matches our material from the Cypress Hills, Sask." ***Best Source of Info:*** S90SOMUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87SOMCFABCA01 Sommerfeldt, B. CF 880114 1987-05-30 [flowers]
S90SOMUAABCA01 Sommerfeldt, B. UA 094486 1990-05-27 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961
Date Source Abstract Code Observer Occurrence Data
[flowers]
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 8 km S of; Lost River, 1.5 km NE of.
General Description: seasonally moist slight depression in sandy grassland
Min Elev. (m): 906 ***Max Elev. (m):*** 9063 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538625 5432975 Lost River 52 4553
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1998-10-00
Last Observed: 1998-10-00 ***First Observed:*** 1998-07-31 ***Actual Mapping Precision (m):*** 10 ***Precision Code:*** S
Directions: Moose Dome Creek, Ridges above.
General Description: fine-textured shattered limestone exposures; level or shallow slopes; with Dryas octopetala community with Carex rupestris and/or Kobresia myosuroides; exposed rock varied between 40-75% of ground surface
Min Elev. (m): 1920 ***Max Elev. (m):*** 2225
Other Comments: 10 populations along ridges E and W of Moose Dome Creek, each has 100 to 700 plants. 3 specimens are collected and will be housed at UofC herbarium.
Management Comments: well site development, recreation area development ***Best Source of Info:*** U98LAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J15 11 653975 5643375 Moose Dome Creek Multi-polygon 3 5000
Source Code Author Publisher Year Title
U98LAN01ABCA Lancaster, Jane 1998 Rare NativePlant Survey Form
Erigeron radicatus dwarf fleabane SRank: S2
++++++++++++++++++++++

Element Code: PDAST3M3L0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1999-06-07
Last Observed: 1999-06-07 ***First Observed:*** 1999-05-27 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Ressor Lake, ridges N of; top of.
General Description: gravelly ridges with sparsely vegetated on cobble surface
Min Elev. (m): 1350 ***Max Elev. (m):*** 1380
Other Comments: Specimens collected, collection numbers RE0004 & RE0006. For detailed habitat information look at EO Data table, and for location at digital Cypress Hills file.
Management Comments: grazing/recreation ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 564750 5502450 Ressor Lake 78 5527
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-27 U99BRA01ABCA Reg Ernst less than 1000 plants in 2000 m2; gravelly (NW through NE) facing ridge; Potentilla fruticosa, Erigeron compositus, Phlox hoodii (Lomatioum cous also present); V6 vegetative; R6 reproductive; aspect NW-N-NE; slope <20%; moisture subxeric
1999-05-28 U99BRA01ABCA Reg Ernst more than 500 plants in 400 m2; high W & N facing gravelly ridge; sparsely vegetated on cobbled surface; Potentilla fruticosa, Carex sp., Phlox hoodii, Oxytropis sericea, Anemone sp.; V6 vegetative; R6 reproductive; aspect W & N; slope <20%; misture subxeric; UTM 12 565 350/5502 150 and 565 250/5502 100
1999-06-07 U99BRA01ABCA Reg Ernst less than 50 plants in 25 m2; gravelly/cobbled NW facing ridge; Potentilla fruticosa, Erigeron compositus, Senecio cana, Carex sp., very limited competition from other species; V6 vegetative; R8 reproductive; aspect NW; slope <30%; moisture xeric
Erigeron radicatus dwarf fleabane SRank: S2

Eriogonum cernuum nodding umbrella-plant

Natural Region: Dry Mixedgrass

Habitat: Sand Dunes; Slopes-Sandy

Phenology: flowers mid-July to August

Specific Search Strategies (if any): search along edges of active dunes and on eroding sands on slopes, especially near valley rims; detectable earlier in the year from previous year's flower stalk and distinctive rosette

Element Occurrences:

Element Code: PDPGN08110 ***Occurrence Code #:*** 001 ***Survey Date:*** 1980-09-18

Last Observed: 1980-09-18 ***First Observed:*** 1959-08-27 ***Precision Code:*** M

Directions: Milk River

General Description: Sandstone "hoodoos', rapidly drained. A talus of sand between sandstone outcrops. With Astragalus kentrophyta, Calamovilfa longifolia, Artemesia caudata

Min Elev. (m): 910 ***Max Elev. (m):*** 910 ***Best Source of Info:*** S80JOHCFABCA06

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S59HUDACONCA01 Hudson, T.H. AC 109912 1959-08-27 rare

S80JOHCFABCA06 Johnson, J.D. CF 802145 1980-09-18 Flowers

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55

Eriogonum cernuum nodding umbrella-plant SRank: S2

++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 002 ***Survey Date:*** 1989-07-22

Last Observed: 1989-07-22 ***First Observed:*** 1989-07-22 ***Precision Code:*** S

Directions: Milk River Natrual Area

General Description: Exposed sandy soil at edge of badlands along Comrey sandstone

Min Elev. (m): 950 ***Max Elev. (m):*** 950 ***Best Source of Info:*** S89WALPPABCA15

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S89WALPPABCA15 Wallis, C. PP 3435 1989-07-22 About 100 plants

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E02 12 523273 5430684 Milk River Natural Area LSD 2 16 27

Eriogonum cernuum nodding umbrella-plant SRank: S2

++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 003 ***Survey Date:*** 1994-00-00

Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S

Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley, upper slope of; Bull Pen, about 1.5 km west of

General Description: gravelly sites

Min Elev. (m): 663 ***Max Elev. (m):*** 663 ***Best Source of Info:*** U96MAC01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188

Source Code Author Publisher Year Title

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

Date Source Abstract Code Observer Occurrence Data

rare in SNWA, numerous plants

Eriogonum cernuum nodding umbrella-plant SRank: S2

++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 004 ***Survey Date:*** 1977-08-21

Last Observed: 1977-08-21 ***First Observed:*** 1977-08-21 ***Precision Code:*** M

Directions: Empress, 7 mi S of

General Description: active sand dune

Min Elev. (m): 709 ***Max Elev. (m):*** 709 ***Best Source of Info:*** S77BRAUAABCA06

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S77BRAUAABCA06 Bradley, C. & C. Wallis UA 75682 1977-08-21 Y flowers

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L16 12 566525 5633600 South Saskatchewan River SE 10-22-1 W4M 7 254

Eriogonum cernuum nodding umbrella-plant SRank: S2

++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 005 ***Survey Date:*** 1990-07-25
Last Observed: 1990-07-25 ***First Observed:*** 1990-07-25 ***Actual Mapping Precision (m):*** 1200 ***Precision Code:*** M
Directions: Red Deer River and Little Sandhill Creek junction, 1000 m SE of.
General Description: Dry badlands, badlands trail; 52 plants in population.
Min Elev. (m): 647 ***Max Elev. (m):*** 647 ***Best Source of Info:*** S90HERUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90HERUCABCA01 Herrmann, Karen UC 49464 1997-07-25 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 464450 5623150 Deadlodge Canyon NE 6-21-11 W4. 3 242
Eriogonum cernuum nodding umbrella-plant SRank: S2
++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 006 ***Survey Date:*** 1974-09-22
Last Observed: 1974-09-22 ***First Observed:*** 1974-09-22 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: CFB Suffield; ~15km NE of NE corner of; bridge over S Saskatchewan River on Hwy 41; ~350m S of.
General Description: Dry loose silt in and around castellated (having battlements like a castle) Belly River outcrops.
Min Elev. (m): 610 ***Max Elev. (m):*** 610 ***Best Source of Info:*** S74HUDACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74HUDACONCA02 Hudson, J.H. AC 355633 1974-09-22 occasional clumps
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 565750 5619800 S Saskatchewan River about NW1/4 27-20-1-W4th. 22 4151
Eriogonum cernuum nodding umbrella-plant SRank: S2
++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 007 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 1.5 km W of; USA border, at.
General Description: sandy soil
Min Elev. (m): 861 ***Max Elev. (m):*** 861 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 539525 5427275 Lost River 38 4185
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 008 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 300 m W of; USA border, 300 m N of.
General Description: sandy soil
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540250 5427600 Lost River 47 4548
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 009 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 2 km W of; USA border, 1.5 km N of.
General Description: sandy soil
Min Elev. (m): 869 ***Max Elev. (m):*** 876 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538300 5428650 Lost River 9 8
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 010 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, W rim of; USA border, 1.3 km N of.
General Description: sandstone outcrops
Min Elev. (m): 846 ***Max Elev. (m):*** 869 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540000 5428550 Lost River 48 4549
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 011 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, E side of; USA border, 2.5 km N of.
General Description: sandy soil on edge of coulee
Min Elev. (m): 838 ***Max Elev. (m):*** 899 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540375 5429600 Lost River 53 4554
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 012 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, E slope and bottom of; USA border, 8 km N of.
General Description: stabilized valley and upland dunes
Min Elev. (m): 861 ***Max Elev. (m):*** 907 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN08110 ***Occurrence Code #:*** 013 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, E rim of; USA border, 7.5 km N of.
General Description: active blowout
Min Elev. (m): 899 ***Max Elev. (m):*** 899 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 536048 5434735 Lost River 33 4555
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Eriogonum cernuum nodding umbrella-plant SRank: S2

***Festuca occidentalis* western fescue**

Natural Region: Foothills Fescue Grassland
Habitat:
Phenology: heads out in late June
Specific Search Strategies (if any): not all dots in Moss are recorded as EOs in ANHIC; needs further investigation to see if these have been revised

Element Occurrences:

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-00-00
Last Observed: 1986-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Dry alluvial fan; with Poa stenantha and Viola glabella.
Min Elev. (m): 1554 ***Max Elev. (m):*** 1554 ***Aspect:*** SW ***Best Source of Info:*** U93ALL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 701750 5456900 South Castle Study site 28 59 524
Source Code Author Publisher Year Title
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1986-00-00
Last Observed: 1986-00-00 ***First Observed:*** 1986-06-24 ***Precision Code:*** S
General Description: Dry; with Carex raynoldsii
Min Elev. (m): 1554 ***Max Elev. (m):*** 1554 ***Aspect:*** W ***Best Source of Info:*** U93ALL01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86ALLPPABCA09 Allen, L. & V. Loewen PP 18 1986-06-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 701700 5456550 South Castle Study site 29 62 525
Source Code Author Publisher Year Title
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1986-00-00
Last Observed: 1986-00-00 ***First Observed:*** 1986-00-00 ***Precision Code:*** S
General Description: Gravelly, scoured creek with balsam poplar - adjacent meadow and Pinus stand
Min Elev. (m): 1556 ***Max Elev. (m):*** 1556 ***Best Source of Info:*** U93ALL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 704150 5454750 South Castle Study site 34 71 528
Source Code Author Publisher Year Title
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1953-08-11
Last Observed: 1953-08-11 ***First Observed:*** 1953-08-11 ***Precision Code:*** M
Directions: BERTHA LAKE
General Description: ROCKY SHORE OF LAKE
Min Elev. (m): 1830 ***Max Elev. (m):*** 1830
Other Comments: DET. BY A.J. BREITUNG; ANNOT BY B. BOIVIN, 1971 AS VAR. OCCIDENTALIS; LAT/LONG DO NOT AGREE WITH POSITION OF LAKE ***Best Source of Info:*** S53BREUAABCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53BREUAABCA36 Breitung, A.J. UA 1904 1953-08-11 [spikelets]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 284500 5434150 Bertha Lake 49 02/113 56 188 1119
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-06-23
Last Observed: 1997-06-23 ***First Observed:*** 1997-06-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hastings Ridge; ~6.25km W of.; junction of Coat Creek and Lynx Creek.
General Description: Lichen ground cover; logging trail on one side and conifer forest on other. A second pop. W in conifer forest near Lynx Creek.
Plant com.:Fest. occ; Cala rub; Phel pra; Elym gla; Trif rep; Ranu unc; Frag vir; Pans con; Sere paup; Anph mar.
Min Elev. (m): 1371 ***Max Elev. (m):*** 1371
Slope: 5.00 ***Aspect:*** W
Other Comments: 200+ individuals. Also present Botr lun, Botr dus. ***Best Source of Info:*** U97TAN02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 681549 5485417 Lynx Creek 49-29.79N;114-29.59W 66 3926
Source Code Author Publisher Year Title
U97TAN02ABCA Tannas, K & E 1997 Shell - Crowsnest pass pipeline survey - Rare Native Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1997-06-23 U97TAN02ABCA vegetative; flowering
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1997-07-18
Last Observed: 1997-07-18 ***First Observed:*** 1997-07-18 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Carbondale River; ~2.5km W of; Lynx Creek; along; road; S of.
General Description: 12 on RoW. Continuous on and off RoW.
Min Elev. (m): 1554 ***Max Elev. (m):*** 1554 ***Best Source of Info:*** U97AXY04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 685483 5481989 Lynx Creek 49-27.85N;114-26.41W/49-27.83N;114-26.18W/49-27.77N;114-25.94W. 75 3941
Source Code Author Publisher Year Title
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378
Festuca occidentalis western fescue SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA2V0M0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1997-07-18
Last Observed: 1997-07-18 ***First Observed:*** 1997-07-18 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Carbondale River; ~4km W of; Lynx Creek; along; road; along.
General Description: 6 on RoW, 100 off RoW closer to road.
Min Elev. (m): 1432 ***Max Elev. (m):*** 1432 ***Best Source of Info:*** U97AXY04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 684176 5482370 Lynx Creek 49-28.08N;114-27.48W - 49-32.0N;114-30.48W - 49-32.0N;114-30.48W 76 3942
Source Code Author Publisher Year Title
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378
Festuca occidentalis western fescue SRank: S1

***Fraxinus pennsylvanica* green ash**

Natural Region: Dry Mixedgrass
Habitat: Woodland
Phenology: leaf out in May
Specific Search Strategies (if any): unsure if this species is introduced/non-native

Element Occurrences:

Element Code: PDOLE040D0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1970-07-02
Last Observed: 1970-07-02 ***First Observed:*** 1970-07-02 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: South Saskatchewan River, W side of; Police Point
General Description: treed terrace bounded on 3 sides by river; P. deltoides, acuminata
Min Elev. (m): 663 ***Max Elev. (m):*** 663 ***Size of Occurrence:*** ***Best Source of Info:*** S70HCXULABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70HCXULABCA03 H.C. UL none 1970-07-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Fraxinus pennsylvanica green ash SRank: S1

Gentiana fremontii

Natural Region: Foothills Fescue Grassland
Habitat: Wetland-Springs
Phenology: flowers late May
Specific Search Strategies (if any): may not occur outside of Aspen Parkland but there appear to be dots in Moss (not in ANHIC data) that would fall within fescue grassland; occurs on small hummocks in seepages or along the edges of seepages; often requires hands and knees parting of the grass; flower stalks are detectable into August

Element Occurrences:

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-05-27
Last Observed: 1989-05-27 ***First Observed:*** 1989-05-27 ***Precision Code:*** M
Directions: Penhold.
General Description: Slough margin, imperfectly drained.
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S89HARCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89HARCFABCA01 Haris, H. CF 900089 1989-05-27
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A04 12 302750 5779750 Fleming Slough 1 2303
Gentiana fremontii SRank: S2S3
++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1980-00-00
Last Observed: 1980-00-00 ***First Observed:*** 1980-00-00 ***Precision Code:*** M
Directions: Cremona, 3 mi. E & 3 mi. S of.
General Description: Along stream with wetland sedges and grasses (i.e. Carex aquatilis).
Min Elev. (m): 1166 ***Max Elev. (m):*** 1166
Other Comments: ID by K. Tannas. AB material of G. aquatica referrable to G. fremontii (WJ Crins to ajg)
Management Comments: This area is one of the few well managed pastures in the Cremona area. Protection shouldn't be necessary. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O09 11 679000 5708400 Cremona 2 2203
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
these specimens are separated from G. prostrat by the following: to 4 cm tall, corolla <10mm long, ovary subsessile, capsule included within calyx, leaves very conspicuously white margined; several plants; flowering
Gentiana fremontii SRank: S2S3
++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1986-06-14 ***Precision Code:*** S
Directions: Wainwright, S of; David Lake area
General Description: hummocks in moist meadows along lake dominated by Antennaria
Min Elev. (m): 665 ***Max Elev. (m):*** 665 ***Best Source of Info:*** S86WALUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86WALUAABCA06 Wallis, C. UA 098392 1986-06-14 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526500 5826250 David Lake 38 305
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis along subsaline higher edges & on hummocks
Gentiana fremontii SRank: S2S3
++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1997-00-00
Last Observed: 1997-00-00 ***First Observed:*** 1997-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Penhold; 23 km E of; along Hwy 42 on S side of.
General Description: near creek, slight slope, good moisture
Min Elev. (m): 945 ***Max Elev. (m):*** 945
Other Comments: specimen collected; AB material of G. aquatica referrable to G. fremontii (WJ Crins to ajg) ***Best Source of Info:*** U97HAR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A04 12 325750 5777800 Penhold TWP:36,RGE:25,W:4,Section:29 3 4345
Source Code Author Publisher Year Title
U97HAR01ABCA Harris, Helen 1997 Rare Native Plant Survey Form
Gentiana fremontii SRank: S2S3
+++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1990-07-07
Last Observed: 1990-07-07 ***First Observed:*** 1990-07-07 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Seebe, ~2.5 km NW of; Yamnuska N.A.
General Description: in the calcareous wetland; assocciated with sedges, butterworts and small wood anemone
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340
Other Comments: Identified by Cliff Wallis. ***Best Source of Info:*** R90WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O03 11 634400 5664325 Yamnuska Natural Area 8-25-8 W5M 40 5015
Source Code Author Publisher Year Title
R90WIL01ABCA Wilkinson, Kathleen Environmental Management Associates 1990 Rare Plant Survey of Proposed Four Seasons Resort Area (8-25-8 W5)
U99WIL01ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to Lorna Allen
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
1990-07-00 R90WIL01ABCA Cliff Wallis occurs very infrequently (<10 plants seen)
Gentiana fremontii SRank: S2S3
+++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1961-05-25
Last Observed: 1961-05-25 ***First Observed:*** 1961-05-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Big Hill Springs Prov. Park, 750 m N of; Big Hill Creek, just W of.
General Description: low wet grassy meadow
Min Elev. (m): 1204 ***Max Elev. (m):*** 1204 ***Size of Occurrence:*** ***Best Source of Info:*** S61CARUCABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S61CARUCABCA06 Carefoot, J. R. UC 21535 1961-05-25 Y immature-no flw. buds
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O08 11 682550 5681400 Big Hill Creek 3 5447
Gentiana fremontii SRank: S2S3
+++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1974-05-23
Last Observed: 1974-05-23 ***First Observed:*** 1974-05-23 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Wildcat Hills; Irwin Hill, 1.5 km NE of.
General Description: moist, beside spring flow, grass; Field No. 8
Min Elev. (m): 1219 ***Max Elev. (m):*** 1219 ***Size of Occurrence:*** ***Best Source of Info:*** S74DANUCABCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74DANUCABCA13 Danielson, Barbara & S. Crack UC 21536 1974-05-23 Y immature
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O07 11 664575 5681400 Irwin Hill 51 18' N, 114 39' W, 33-26--5-W5M 2 5448
Gentiana fremontii SRank: S2S3
+++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 021 ***Survey Date:*** 1971-05-23
Last Observed: 1971-05-23 ***First Observed:*** 1971-05-23 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Mitford, 4.25 km NW of; Wildcat Hills, 2.5 km E of, Forestry Trunk Road, along.
General Description: grassy, grazed area at foot of S-facing hill
Min Elev. (m): 1128 ***Max Elev. (m):*** 1128 ***Size of Occurrence:*** ***Best Source of Info:*** S71WHIUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71WHIUCABCA02 Whitehorn, J. K. UC 21534 1971-05-23 Y immature flower buds
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O02 11 669100 5679850 Wildcat Hills 14 5449
Gentiana fremontii SRank: S2S3
+++++++++++++++++++++++

Element Code: PDGEN060Y0 ***Occurrence Code #:*** 023 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chauvin, 8 km SE of; Reflex Lake; Tps 42 &43-R1-W4M
General Description: forb-rich meadows associated with permanent, moder. saline springs; open water of springs with Junc bal, Lemn min, Ranu cir
Min Elev. (m): 600 ***Max Elev. (m):*** 600
Other Comments: recommend: protectn of wetland basin, no groundwater pumping, explore purchase of critical lands, fencing & grazing mgmt, confine rec. dev't to existing lease
Management Comments: problems with recreat. cottage dev't, ATV use, cattle grazing; gas & oil wells on adjacent lands . ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 565600 5835300 Reflex Lake Polygon 15 4598
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report in-house
Gentiana fremontii SRank: S2S3

Gratiola neglecta clammy hedge-hyssop

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass
Habitat: Wetland
Phenology: flowers mid-June to July
Specific Search Strategies (if any): detectable into September; search exundated shores or bottoms of sloughs

Element Occurrences:

Element Code: PDSCR0R070 ***Occurrence Code #:*** 001 ***Survey Date:*** 1956-06-13
Last Observed: 1956-06-13 ***First Observed:*** 1956-06-13 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Vermilion, 10 mi N of.
General Description: edge of small flash pond. ***Best Source of Info:*** S56BIRUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S56BIRUAABCA02 Bird, C.D. AC 154340 1956-06-13
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E07 12 508700 5927300 3 6065
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 002 ***Survey Date:*** 1926-07-13
Last Observed: 1926-07-13 ***First Observed:*** 1926-07-13 ***Actual Mapping Precision (m):*** 8000 ***Precision Code:*** G
Directions: Castor, S of.
General Description: small roadside slough ***Best Source of Info:*** S26BRIACONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S26BRIACONCA03 Brinkman, A.H. AC 124969 1926-07-13
S26BRIACONCA04 Brinkman, A.H. AC 429634 1926-07-13
S26BRIACONCA05 Brinkman, A.H. NM none 1926-07-13
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D04 12 437800 5777750 2 6066
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 003 ***Survey Date:*** 1951-08-22
Last Observed: 1951-08-22 ***First Observed:*** 1951-08-22 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Granum, E of.
General Description: slough border. ***Best Source of Info:*** S51MOSACONCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51MOSACONCA13 Moss, E.H. AC 429638 1951-08-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 324700 5527300 9 6067
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 004 ***Survey Date:*** 1951-08-20
Last Observed: 1951-08-20 ***First Observed:*** 1951-08-20 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Cardston, N of.
General Description: moist depression nearly dry pond. ***Best Source of Info:*** S51MOSACONCA14
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51MOSACONCA14 Moss, E.H. AC 429639 1951-08-20
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 332800 5455000 45 6068
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
+++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 005 ***Survey Date:*** 1944-07-22
Last Observed: 1944-07-22 ***First Observed:*** 1933-06-24 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Ft Saskatchewan.
General Description: wet slough margin.
Min Elev. (m): 625 ***Max Elev. (m):*** 625 ***Best Source of Info:*** S44TURUCABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S33TURACONCA01 Turner, G. H. AC 429631 1933-06-24
S33TURACONCA02 Turner, G. H. AC 429636 1933-06-25
S40TURACONCA03 Turner, G.H. AC 429641 1940-06-29
S44TURACONCA07 Turner, G. H. AC 429633 1944-07-22
S44TURACONCA08 Turner, G. H. AC 429635 1944-07-21
S44TURUCABCA06 Turner, G.H. UC 23220 1944-07-22 Y flowering and fruiting
S44TURULABCA04 Turner, G. H. UL 1944-07-22 Y fruiting, some flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 354400 5951800 Fort Saskatchewan 49 6069
Date Source Abstract Code Observer Occurrence Data
1944-07-22 Turner, G.H. flowering and fruiting
1978-07-20 Webster, T. fruiting, some flowering
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
++++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 006 ***Survey Date:*** 1935-07-18
Last Observed: 1935-07-18 ***First Observed:*** 1935-07-18 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Camrose, 12 mi NE of; Lake de May.
General Description: muddy ground. ***Best Source of Info:*** S35TURACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35TURACONCA01 Turner, G. H. AC 429637 1935-07-18
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H02 12 386300 5887000 DeMay Lake 5 6070
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
++++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 007 ***Survey Date:*** 1951-08-25
Last Observed: 1951-08-25 ***First Observed:*** 1951-08-25 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Langdon.
General Description: slough edge.
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005 ***Best Source of Info:*** S51SEXALABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51SEXALABCA04 Sexsmith, J.J. AL 4842 1951-08-25 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I13 12 312000 5650100 Langdon 6 6071
Gratiola neglecta clammy hedge-hyssop SRank: S2S3
++++++++++++++++++++++++

Element Code: PDSCR0R070 ***Occurrence Code #:*** 008 ***Survey Date:*** 1953-07-07
Last Observed: 1953-07-07 ***First Observed:*** 1953-07-07 ***Actual Mapping Precision (m):*** 8000 ***Precision Code:*** G
Directions: Hanna, S of; Sullivan L, E of. (changed to N of Hanna as Sullivan Lake is north).
General Description: dry slough bottom ***Best Source of Info:*** S53MOSNMONCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53MOSNMONCA13 Moss, E. H. NM 231395 1953-07-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M13 12 442000 5758000 1 6072
Gratiola neglecta clammy hedge-hyssop SRank: S2S3

Halimolobos virgata halimolobos

Natural Region: Mixedgrass, Dry Mixedgrass

Habitat: Grassland-Sandy

Phenology: flowers in May and early June

Specific Search Strategies (if any): sandy or sandy alkaline grassland, perhaps occasionally on gravelly sands; not all dots in Moss are represented by these EOs

Element Occurrences:

Element Code: PDBRA1A040 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-06-23

Last Observed: 1995-06-23 ***First Observed:*** 1995-06-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Canadian Forces Base Suffield National Wildlife Area; Linstead Flats, about 5 km east of.

General Description: Xeric site, located at a single station in a gently rolling sand plain prairie grassland; in association with Draba reptans.

Min Elev. (m): 724 ***Max Elev. (m):*** 724 ***Size of Occurrence:*** 0.04

Other Comments: apparently this is the first record for this species from Alberta for 50 years ***Best Source of Info:*** S95MACPMABCA04

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S95MACPMABCA04 Macdonald, I.D. PM B95.9.6 1995-06-23 Y fruits only; very locally occasional

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L09 12 539000 5597000 Middle Sand Hills UTM WL 539000 / 5597000; 50 31 28/110 26 15 2 216

Source Code Author Publisher Year Title

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

Date Source Abstract Code Observer Occurrence Data

rare in Alberta and in SNWA, about 20 plants over an area of 15x25 m.

Halimolobos virgata halimolobos SRank: S1

++++++++++++++++++++++

Element Code: PDBRA1A040 ***Occurrence Code #:*** 002 ***Survey Date:*** 1978-05-16

Last Observed: 1978-05-16 ***First Observed:*** 1978-05-16 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: CFB Suffield; ~16km NE of NE corner of; S. Saskatchewan River; ~500m NE of Hwy 41 bridge over.

General Description: sagebrush covered silt flat just above river level, E of bridge, N side of river. Colonies good-sized but spottily distributed with Arabis retrofracta; Allium textile;Lappula redowskii.

Min Elev. (m): 594 ***Max Elev. (m):*** 594 ***Best Source of Info:*** S78HUDACONCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S78HUDACONCA01 Hudson, J.H. AC 335977 1978-05-16 colonies good sized but spottily distributed.

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L09 12 566400 5620450 Sandy Point LSD 2 in 34-20-1 W4M. 23 4127

Halimolobos virgata halimolobos SRank: S1

Heliotropium curassavicum spatulate-leaved heliotrope

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowering late June to July
Specific Search Strategies (if any): alkali wetlands, especially larger lake basins; easiest to detect when waters have receded and search shallows or mud-flats

Element Occurrences:

Element Code: PDBOR0J080 ***Occurrence Code #:*** 001 ***Survey Date:*** 1980-07-17
Last Observed: 1980-06-19 ***First Observed:*** 1978-06-14 ***Precision Code:*** M
Directions: Hanna, approx. 28 mi, ESE of;Scotfield off Highway 9, 3 mi SW of;Plover Lake, S shore of
General Description: growing on dry lake bed in association with Hordeum jubatum. Saline flat
Min Elev. (m): 739 ***Max Elev. (m):*** 760
Other Comments: Slide #F783.001; F783.002 ***Best Source of Info:*** S80SADUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S80SADPMABCA01 Sadler, T. PM B80.16.2 1980-07-17 Y
S80SADUCABCA01 Sadler, Tom UC 42834 1980-06-19 Y extremely abundant; blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M06 12 473100 5703650 Plover Lake 51-30N/111-25W 1 257
Source Code Author Publisher Year Title
I78MUS02ABCA Mussell, Dave 1978
I78XXX04ABCA 1978
Date Source Abstract Code Observer Occurrence Data
blooming, extremely abundant(S80SADUCABCA01)
Heliotropium curassavicum spatulate-leaved heliotrope SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0J080 ***Occurrence Code #:*** 002 ***Survey Date:*** 1982-07-14
Last Observed: 1982-07-14 ***First Observed:*** 1982-07-14 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Purple Springs, 2 km S of.
General Description: Cropland; moist lowland.
Min Elev. (m): 815 ***Max Elev. (m):*** 815 ***Best Source of Info:*** S82SHAALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82SHAALABCA01 Shaw, Blair AL 5261 1982-07-14 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 436000 5516675 Purple Springs 7 153
Heliotropium curassavicum spatulate-leaved heliotrope SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0J080 ***Occurrence Code #:*** 003 ***Survey Date:*** 1986-06-11
Last Observed: 1986-06-11 ***First Observed:*** 1986-06-11 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Pakowki Lake; SW of Orion; NE shore of.
General Description: on sandy, muddy prairie slough at edge of intermittent lake
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Best Source of Info:*** S86HRAPMABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA11 Hrapko, J.O., Richards, W.M., Dickinson, R.B. PM B86.127.18 1986-06-11 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Heliotropium curassavicum spatulate-leaved heliotrope SRank: S1
++++++++++++++++++++++

Element Code: PDBOR0J080 ***Occurrence Code #:*** 004 ***Survey Date:*** 1998-07-11
Last Observed: 1998-07-11 ***First Observed:*** 1998-07-11 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Many Island Lake, saline flats on E shore of ephemeral lake, just W of silt dune.
General Description: moist saline flats at waters edge, open with Sporobolus cryptandrus and Puccinellia distans
Other Comments: Water levels just starting to come up after a very dry spring. ***Best Source of Info:*** S98ALLPPABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S98ALLPPABCA01 Allen, Lorna PP 3566 1998-07-11 Y scattered
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L01 12 564300 5553125 Many Island Lake LSD 10 32-13-1 W4M 8 5016
Date Source Abstract Code Observer Occurrence Data
1998-07-11 L. Allen scattered, not quite full bloom
Heliotropium curassavicum spatulate-leaved heliotrope SRank: S1

Hordeum pusillum **little barley**

Natural Region: Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: heads out in June
Specific Search Strategies (if any): historical record; suggest surveys of sandy and gravelly slopes in vicinity of Yucca glauca stands

Element Occurrences:

Element Code: PMPOA380B0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1952-06-30
Last Observed: 1952-06-30 ***First Observed:*** 1952-06-30 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Milk River, N side of; U.S.A. border, 1 km N of.
Min Elev. (m): 838 ***Max Elev. (m):*** 838
Other Comments: See Report. ***Best Source of Info:*** U93SMI02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 529323 5428134 Milk River 2 13
Source Code Author Publisher Year Title
U93SMI02ABCA Smith, Bonnie COSEWIC 1993 Status report on the Little Barley Hordeum pusillum in Canada
Hordeum pusillum little barley SRank: SH

Hymenopappus filifolius tufted hymenopappus

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowering late May to early June
Specific Search Strategies (if any): search primarily at interface between valley and uplands wherever there is some eroding soil; appear to occur on both heavier and sandy textured soils, often on south-facing aspects

Element Occurrences:

Element Code: PDAST51030 ***Occurrence Code #:*** 001 ***Survey Date:*** 1992-05-31
Last Observed: 1992-05-31 ***First Observed:*** 1940-06-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Whiskey Gap; Sommerfeldt Ranch.
General Description: Dry grassland; Rough Fescue grassland
Min Elev. (m): 1280 ***Max Elev. (m):*** 1400 ***Best Source of Info:*** S92SOMCFABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S40MOSUAABCA15 Moss, E.H. UA 18279 1940-06-25 Y flowers
S51MOSNMONCA01 Moss, E.H. NM 216888 1951-08-18
S51MOSUAABCA12 Moss, E.H. UA 18282 1951-08-18 Y flowers
S87SOMCFABCA02 Sommerfeldt, B. CF 880115 1987-05-30 Flowers
S92SOMCFABCA05 Sommerfeldt, B. CF 880115 1992-05-31 Y
S92SOMCFABCA06 Sommerfeldt, B. CF 880115 1992-05-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961
Date Source Abstract Code Observer Occurrence Data
Flowers
Hymenopappus filifolius tufted hymenopappus SRank: S2
+++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 002 ***Survey Date:*** 1999-06-17
Last Observed: 1999-06-17 ***First Observed:*** 1983-06-22 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Ross Lake, 5 km S of; North Milk River, 3.5 km N of.
General Description: well drained, sparsely vegetated, moderate sloped ridge tops; Festuca spp., Thermopsis rhombifolia, Guteirrezia sarothrae, Comandra umbellata
Min Elev. (m): 1350 ***Max Elev. (m):*** 1395 ***Aspect:*** W&S ***Best Source of Info:*** S83ALLPPABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83ALLPPABCA07 Allen, L., P. McIsaac & M. Bailey PP 769 1983-06-22
S83ALLPPABCA08 Allen, L., P. McIsaac & M. Bailey PP 770 1983-06-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 359500 5440150 Ross Lake 5,6-2-22 W4M 3 921
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
Uncommon- S Alta, dry hills/plains
1998-06-06 U98ERN01ABCA Reg Ernst 95% vegetative and 5% flower; widspread and locally abundant at Ross Grassland NA
1999-06-17 U99ERN02ABCA Reg Ernst in bloom
Hymenopappus filifolius tufted hymenopappus SRank: S2
+++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 003 ***Survey Date:*** 1992-05-26
Last Observed: 1992-05-26 ***First Observed:*** 1958-08-24 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Writing-on-Stone Provincial Park
General Description: on dry open prairie in heavy textured soils.
Min Elev. (m): 910 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S92JOHCFABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58MOSUAABCA29 Moss, E.H. UA 18283 1958-08-24 Y remains of flowers & heads
S64DEVACONCA15 de Vries, B. AC 389662 1964-06-12 ? local and uncommon
S66DEVPMABCA16 de Vries, Bernard PM B68.4.136 1966-06-12 Y
S92JOHCFABCA11 Johnson, J.D. CF 930229 1992-05-26 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454849 5436708 Writing-on-stone Provincial Park 28 76
Hymenopappus filifolius tufted hymenopappus SRank: S2
+++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 005 ***Survey Date:*** 1989-06-28
Last Observed: 1989-06-28 ***First Observed:*** 1989-06-28 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Writing-on-Stone Provincial Park campground; ~11 km WNW of; Verdigris coulee; ~2.5 km SSW of mouth of.
Min Elev. (m): 980 ***Max Elev. (m):*** 980 ***Best Source of Info:*** S89HRAPMABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89HRAPMABCA07 Hrapko, J.O. PM B89.17.20 1989-06-28 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 443948 5437333 Milk River 49-07N/111-46W 33 4317
Hymenopappus filifolius tufted hymenopappus SRank: S2
++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 006 ***Survey Date:*** 1983-06-19
Last Observed: 1983-06-19 ***First Observed:*** 1983-06-19 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Milk River (town); ~29 km WSW of; Milk River (SW arm) ~5km S of.
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Best Source of Info:*** S83ALLPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83ALLPMABCA02 Allen, L., McIsaac, P., Bailey, M. PM B86.70.17 1983-06-19 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H01 12 395025 5431250 Milk River-SW arm 49-02N/112-27W 9 4318
Hymenopappus filifolius tufted hymenopappus SRank: S2
++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 007 ***Survey Date:*** 1992-06-23
Last Observed: 1992-06-23 ***First Observed:*** 1990-06-27 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: McIntyre Ranch; Milk River Ridge.
General Description: grassy eroding base of rock outcrops on slope. Sandy gravel at base of hoodo. Along abandoned road.
Min Elev. (m): 1235 ***Max Elev. (m):*** 1250 ***Aspect:*** W ***Best Source of Info:*** S90HRAPMABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90HRAPMABCA05 Hrapko, J.O., Laird, L.D. PM B90.36.20 1990-06-27 Y
S91LAIPMABCA05 Laird, L.D., Enns, L.K. PM B91.21.22 1991-06-26 Y
S92HRAPMABCA02 Hrapko, J.O., Laird, L.D. PM B92.25.1 1992-06-23 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294
Hymenopappus filifolius tufted hymenopappus SRank: S2
++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 008 ***Survey Date:*** 1991-07-25
Last Observed: 1991-07-25 ***First Observed:*** 1991-07-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Pothole Creek; S of headwaters of; Ross Lake; ~2.9 km WSW of.
General Description: Stipa-Agropyron grassland near top of dry, partly-protected slope
Min Elev. (m): 1360 ***Max Elev. (m):*** 1360 ***Aspect:*** S ***Best Source of Info:*** S91HRAPMABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91HRAPMABCA11 Hrapko, J.O., Laird, L.D., Enns, L.K. PM B91.40.11 1991-07-25 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 356800 5444500 Ross Lake 49-8.5N/112-58W 25 4319
Hymenopappus filifolius tufted hymenopappus SRank: S2
++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 009 ***Survey Date:*** 1998-06-06
Last Observed: 1998-06-06 ***First Observed:*** 1998-06-06 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Ross Lake, 3.5 km SE of; North Milk River, 3.5 km N of.
General Description: well drained, sparsely vegetated, moderate sloped ridge tops; Festuca spp., Thermopsis rhombifolia, Guteirrezia sarothrae, Comandra umbellata
Min Elev. (m): 1275 ***Max Elev. (m):*** 1310 ***Aspect:*** W&S ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 362800 5442675 Ross Lake 15,16-2-22 W4M 27 5040
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
1998-06-06 U98ERN01ABCA Reg Ernst 95% vegetative and 5% flowers; widespread and locally abundant at Ross Grassland NA
1999-06-17 U99ERN02ABCA Reg Ernst in bloom
Hymenopappus filifolius tufted hymenopappus SRank: S2
++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 010 ***Survey Date:*** 1986-07-14

Last Observed: 1986-07-14 ***First Observed:*** 1986-07-11 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: Milk River, 30 km W of; North Milk River, 0.5 km S of.

General Description: on flat saline terrace; associated with Poa interior, Heterotheca villosa, Poa sandbergii and Koeleria macrantha

Min Elev. (m): 1105 ***Max Elev. (m):*** 1105 ***Best Source of Info:*** U99WIL02ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H01 12 391950 5443200 North Milk River SE21-2-19 W4M 15 5070

Source Code Author Publisher Year Title

U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999

Hymenopappus filifolius tufted hymenopappus SRank: S2

++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 011 ***Survey Date:*** 1986-07-14

Last Observed: 1986-07-14 ***First Observed:*** 1986-07-11 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: Milk River, 27 km W of; North Milk River, S bank of.

General Description: eroded cut bank of river, associated with Phlox hoodii, Paronychia sessiliflora, A. dasystachyum, P. sandbergii; and on slump slope (mid-slope & summit) with Selaginella densa, A. dasystachyum, S. comata, Koeleria macrantha, Carex filifolia

Min Elev. (m): 1100 ***Max Elev. (m):*** 1100 ***Aspect:*** NW ***Best Source of Info:*** U99WIL02ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H01 12 394400 5442200 North Milk River NE14-2-19 W4M 16 5071

Source Code Author Publisher Year Title

U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999

Hymenopappus filifolius tufted hymenopappus SRank: S2

++++++++++++++++++++++

Element Code: PDAST51030 ***Occurrence Code #:*** 012 ***Survey Date:*** 1986-07-14

Last Observed: 1986-07-14 ***First Observed:*** 1986-07-11 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M

Directions: Milk River, 22 km W of; Milk River, N bank of.

General Description: bank of river; associated with Stipa comata, Agropyron dasystachyum, Sellaginela densa, Phlox hoodii

Min Elev. (m): 1090 ***Max Elev. (m):*** 1090 ***Aspect:*** SE ***Best Source of Info:*** U99WIL02ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H01 12 399250 5442600 Milk River NW17-2-18 W4M 17 5072

Source Code Author Publisher Year Title

U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999

Hymenopappus filifolius tufted hymenopappus SRank: S2

Iris missouriensis **western blue flag**

Natural Region: Foothills Fescue Grassland (as a native species)
Habitat: Wetland-Meadow
Phenology: flowers late June
Specific Search Strategies (if any): locate some existing stands to get a "color" image and scan shallow wetlands (without standing water, or edges of wetlands with standing water) and stream banks in grassland settings with binoculars to detect additional populations

Element Occurrences:

Element Code: PMIRI090L0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1998-06-20
Last Observed: 1998-06-20 ***First Observed:*** 1964-07-01 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Whiskey Gap, 1.5 km NW of.
General Description: shrubby cinquefoil thicket beside bare alkaline areas, below springy area
Min Elev. (m): 1288 ***Max Elev. (m):*** 1288 ***Aspect:*** S
Other Comments: There were two subpopulations, one down near the road (specimens from B. de Vries) and one up on slopes described by C. Wallis. The first one has been eliminated (B.de Vries per. comm., Feb, 1989) in B89WAL02ABCA. ***Best Source of Info:*** S64DEVUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVACONCA06 de Vries, B. AC none 1964-07-01
S64DEVNMONCA01 de Vries, B. NM 477129 1964-07-01
S64DEVNMONCA02 de Vries, B. NM 563322 1964-07-01
S64DEVUCABCA01 de Vries, B. UC 06843 1964-07-01
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 350950 5433950 Whiskey Gap LSD16-17-1-23 W4M 17 957
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta: 1998 Population Assessment
Date Source Abstract Code Observer Occurrence Data
1964-07-01 S64DEVUCABCA de Vries only station observed between Whiskey Gap and Carway
1987-08-04 B88WAL01ABCA Cliff Wallis 203 non-flowering stems
1998-06-20 R98COR01ABCA Beth Cornish 111 non-flowering stems and 2 flowering
1999-09-24 PNDSOM01ABCA population rarely flowers--observed only once by Sommerfeldt's
Iris missouriensis western blue flag SRank: S1
++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1998-06-22
Last Observed: 1998-06-22 ***First Observed:*** 1964-06-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Carway, 7 km NE of; Hwy 2, 250 m W of.
General Description: damp; open rangeland, margin of shallow depression
Min Elev. (m): 1355 ***Max Elev. (m):*** 1355 ***Best Source of Info:*** S64DEVUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVACONCA05 de Vries, B. AC none 1964-06-30
S64DEVUCABCA02 de Vries, B. UC 06844 1964-06-30
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 328700 5435500 Carway LSD8,9,10-24-26-1 W4M 18 958
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta: 1998 Population Assessment
Iris missouriensis western blue flag SRank: S1
++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1979-06-23
Last Observed: 1979-06-23 ***First Observed:*** 1979-05-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Village, 0.8 km N of; Lake, N of; Junky yard, E of.
General Description: slough edge, moist area, pasture
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S79GSHUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78XXXALABCA01 Unknown AL 3488 1978-06-19
S79GSCACONCA01 Gschaid, S & R AC none 1979-06-23
S79GSHUAABCA01 Gschaid & Smoliak UA 79673 1979-06-22
S79SMOALABCA01 Smoliak, S. & R.G. Gschaid AL 5143 1979-05-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 372700 5527700 Picture Butte Reservoir Lat/Long: 49 53'/ 112 46' 3 1400
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
Date Source Abstract Code Observer Occurrence Data
Perennial with a thick knotted rhizome, flowers in late June.
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1999-06-30
Last Observed: 1999-06-30 ***First Observed:*** 1974-06-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Police Outpost P.P.; Outpost Lake, very SE end of.
General Description: willow break on lake shore; apparently not as vigorous as in many grazed stands
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370 ***Aspect:*** W
Other Comments: C. Wallis observed about 600 to 650 stems; in 1998 there are only about 325 stems, 147 stems noted in 1999 ***Best Source of Info:*** R98COR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 320550 5430800 Police Outpost Provincial Park LSD8-6-1-26 W4M 43 4716
Source Code Author Publisher Year Title
B88WAL01ABCA Wallis, Clifford Alberta Forestry, Lands and Wildlife 1988 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
I80XXX02ABCA 1980
INDWAL01ABCA Wallis, C.
R98COR01ABCA Cornish, Beth Alberta Environmental Protection, Edmonton, Alberta 1998 Western Blue Flag (Iris missouriensis) Monitoring Program in Southwestern Alberta: 1998 Population Assessment
U74CRA01ABCA Crack, S. & B.J. Danielson AB Rec., Parks & Wildlife, Parks Division 1974 Police Outpost 1974 Ecological Study
U78MOR01ABCA More, Gavin Alberta Recreation, Parks and
Wildlife 1978 Memo -- Unique Plant Species Map - Police Outpost Park
Date Source Abstract Code Observer Occurrence Data
1974-06-00 U74CRA01ABCA plant found growing along an intermittent stream inlet to the lake
1986-06-17 B89WAL02ABCA C. Wallis 20 flowering stalks
1987-06-19 B89WAL02ABCA C. Wallis 18 flowering stalks
1989-07-01 B89WAL02ABCA C. Wallis 6 flowering stalks
1998-06-22 R98COR01ABCA Beth Cornish about 325 individuals, only 1 flowering stalk; no Iris in monitoring plot
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1999-09-24
Last Observed: 1999-09-24 ***First Observed:*** 1992-06-02 ***Actual Mapping Precision (m):*** 1400 ***Precision Code:*** M
Directions: Whiskey Gap, Sommerfeldt Ranch
General Description: moist meadow
Min Elev. (m): 1300 ***Max Elev. (m):*** 1300
Slope: 0.00 ***Best Source of Info:*** S92SOMCFABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92SOMCFABCA07 Sommerfeldt, B. CF 930305 1992-06-02 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 353600 5430475 Whiskey Gap 49 01N/113 01W 33 972
Source Code Author Publisher Year Title
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
Date Source Abstract Code Observer Occurrence Data
1999-09-24 PNDSOM01ABCA B. Sommerfeldt in pers. comm. to J. Gould Sept. 24, 1999 are four subpopulations all of which are natural. Subpopulation 1--lots of plants in 1970's, stopped pasturing in ~1982 and population declined. Some bloom and have been handclipping grass--seems to have helped. Subpopulation 2--bottom of valley--doing well, ~30 corms. Subpopulation 3--200-250 corms, blooms often; subpopulation 4--5-6 corms--heavy grass but do bloom every year
Iris missouriensis western blue flag SRank: S1

Element Code: PMIRI090L0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1989-06-25
Last Observed: 1989-06-25 ***First Observed:*** 1989-06-25 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Beazer, 7.5 km SE of; Ockey Ridge, ~2 km SE of.
General Description: along moist meadow in drainage
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Best Source of Info:*** B89WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 325750 5440400 Ockey Ridge SE3-2-26 W4M 40 4713
Source Code Author Publisher Year Title
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
Date Source Abstract Code Observer Occurrence Data
1989-06-25 B89WAL02ABCA C. Wallis several hundred flowering stalks with perhaps 1500 steams
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1989-00-00
Last Observed: 1989-00-00 ***First Observed:*** 1989-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Mary Lake, SE end of.
General Description: shore of lake
Min Elev. (m): 1272 ***Max Elev. (m):*** 1272 ***Best Source of Info:*** B89WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 340000 5431100 Mary Lake SE7-1-24 W4M 41 4714
Source Code Author Publisher Year Title
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
Date Source Abstract Code Observer Occurrence Data
B98WAL02ABCA Dr. George Scotter small population with 4 flowering stalks
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1999-06-00
Last Observed: 1999-06-00 ***First Observed:*** 1989-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Carway, 4 km NE of.
General Description: associated with Potentilla fruticosa-Festuca and Deschampsia cespitosa habitat types [
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340
Other Comments: on road in from Hwy 2 locate turnoff to Harrisville(signed & with a little church on right); Drive 1.8km W on Police Lake Rd-should be farm driveway on left; irises are between fence posts 11 & 12 W of driveway ***Best Source of Info:*** B89WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 328400 5433000 Boundary Creek N12-1-26 W4M 42 4715
Source Code Author Publisher Year Title
B89WAL02ABCA Wallis, C. World Wildlife Fund Canada 1989 Western Blue Flag (Iris missouriensis Nutt.) Management Plan
U99DOL01ABCA Dolman, T. and D. 1999 Notes on Iris missouriensis-email to Joyce Gould
Date Source Abstract Code Observer Occurrence Data
B89WAL02ABCA Dr. George Scotter 25-30 flowering stalks
1999-00-00 U99DOL01ABCA Doug and Teresa Dolman irises in corner between E-W fence (along the road) and the N-S fence
1999-06-00 PNDDOL01ABCA Doug and Teresa Dolman approx. 10 stems noted
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1993-06-17 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Calgary; University of Calgary, just W of; Higher Education Reserve.
General Description: in grove consisting mainly of poplar
Min Elev. (m): 1112 ***Max Elev. (m):*** 1112
Other Comments: introduced ***Best Source of Info:*** A95STI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 700000 5662000 Calgary - University Heights 28 1877
Source Code Author Publisher Year Title
A95STI01ABCA Stiles, Don Iris, Issue 24 1995 Possible outlier of a rare plant- Iris missouriensis nutt.- Western Blue Flag.
Date Source Abstract Code Observer Occurrence Data
1993-06-17 A95STI01ABCA Ann Brebner one plant in bloom; from the article looks like only one plant is there
1994-00-00 A95STI01ABCA Ann Brebner no bloom
1995-00-00 A95STI01ABCA Ann Brebner no bloom
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1997-00-00
Last Observed: 1997-00-00 ***First Observed:*** 1997-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Calgary; Calgary International Airport, at.
Min Elev. (m): 1082 ***Max Elev. (m):*** 1082
Other Comments: introduced; specimen has been collected ***Best Source of Info:*** U97WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 708000 5666200 Calgary International Airport 18 4743
Source Code Author Publisher Year Title
U97WAL01ABCA Wallis, Cliff 1997 Rare Native Plant Report Form
Date Source Abstract Code Observer Occurrence Data
1997-00-00 U97WAL01ABCA Cliff Wallis 400 plants - introduced
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1997-07-00
Last Observed: 1997-07-00 ***First Observed:*** 1996-06-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Banff N.P.; Massive; UTM E584745 N5675105.
General Description: grassy knoll with Agropyron subsecundum and Potentilla fruticosa; along powerline
Min Elev. (m): 1400 ***Max Elev. (m):*** 1400
Other Comments: appears to be introduced - rear human activity; specimen has been collected ***Best Source of Info:*** U97WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O04 11 584700 5675000 Massive Station 150 2051
Source Code Author Publisher Year Title
U97WAL01ABCA Wallis, Cliff 1997 Rare Native Plant Report Form
Date Source Abstract Code Observer Occurrence Data
1997-07-00 U97WAL01ABCA Cliff Wallis 1000 plants in 30 clumps and scattered individuals; 25% of population in bloom
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1995-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Frank Lake, central west shore of; N side of road.
General Description: ditch; with cultivated irises
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005
Other Comments: introduced; specimen has been collected; Cliff probably used for Twp border county/municipial border instead of real Twp border ***Best Source of Info:*** U95WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I12 12 307350 5602300 Frank Lake LSD15 Sec19-18-27 W4M 5 4744
Source Code Author Publisher Year Title
U95WAL02ABCA Wallis, Cliff 1995 Rare Native Plant Report Form
Iris missouriensis western blue flag SRank: S1
+++++++++++++++++++++++

Element Code: PMIRI090L0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1999-06-00
Last Observed: 1999-06-00 ***First Observed:*** 1999-06-00 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Outpost Lake, 8 km NE of; Ockney Ridge, 1.5 km SE of.
General Description: near fenceline; E from hwy 2 on road signed "Granite Ranch"; ~0.45km from Hwy in gravel road on right; ~20 fence posts beyond gate another gate fence heads S, across watercourse into small dugout
Min Elev. (m): 1372 ***Max Elev. (m):*** 1372 ***Size of Occurrence:*** ***Best Source of Info:*** U99DOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 324150 5439525 Police Lake Road 44 5472
Source Code Author Publisher Year Title
U99DOL01ABCA Dolman, T. and D. 1999 Notes on Iris missouriensis-email to Joyce Gould
Date Source Abstract Code Observer Occurrence Data
1999-06-00 U99DOL01ABCA 2 clumps; one inside the fence a few feet and the other under or just outside the fence
Iris missouriensis western blue flag SRank: S1

Juncus confusus few-flowered rush

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Meadow
Phenology: heads out in early June
Specific Search Strategies (if any): easiest to detect and identify accurately in July and August after seed set; stems are clearly identifiable into September; edges of shallow wetlands in grassland-meadow interface; moist swales in grassland, especially where there is some sandy component to the soil

Element Occurrences:

Element Code: PMJUN010S0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-06-10
Last Observed: 1995-06-10 ***First Observed:*** 1995-06-10 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hardisty, S of; large wetland.
General Description: Assoc. with sedge marsh & wet meadow; open water zone has sandy clay shoreline. Wet meadow portion dom. by grasses. Junc. balticus-Carex spp.-Equis. hyemale-Antennaria sp.-Galium sp.?-Sisyr. montanum-Taraxacum officinale
Min Elev. (m): 670 ***Max Elev. (m):*** 670
Other Comments: air photo 1-8 (1:30000) ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 481600 5830200 Hardisty Plot #51A 1 314
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Date Source Abstract Code Observer Occurrence Data
1995-06-10 B95WIL01ABCA In shoreline zone around large pond: 10 m band around pond. 25% coverage.
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1939-07-31
Last Observed: 1939-07-31 ***First Observed:*** 1939-07-29 ***Precision Code:*** M
Directions: Pincher Creek, 2 mi N
General Description: low place in prairie
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Best Source of Info:*** S39MOSACONCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S39MOSACONCA06 Moss, E.H. AC none 1939-07-29
S39MOSUAABCA12 Moss, E.H. UA 4569 1939-07-31
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 697300 5471550 Pincher Creek 49 22/114 17 162 788
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1940-06-24
Last Observed: 1940-06-24 ***First Observed:*** 1940-06-24 ***Precision Code:*** M
Directions: Twin Butte, 2 mi N of; Waterton Lakes National Park, N of.
General Description: adjoining fescue prairie, salicetum.
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Best Source of Info:*** S40MOSUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S40MOSACONCA02 Moss, E.H AC none 1940-06-24
S40MOSUAABCA04 Moss, E. UA 4571 1940-06-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 292550 5463650 Yarrow Creek 6 1334
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1939-08-08
Last Observed: 1939-08-08 ***First Observed:*** 1939-08-08 ***Precision Code:*** M
General Description: open place, base of rocky slope, somewhat sandy soil , with grasses and shrubs
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Best Source of Info:*** S39MOSUAABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S39MOSACONCA05 Moss, E.H. AC 134891 1939-08-08
S39MOSUAABCA11 Moss, E.H. UA 4570 1939-08-08
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 704850 5495950 Lundbreck 49 02 N, 113 01W 24 840
Juncus confusus few-flowered rush SRank: S2S3

Element Code: PMJUN010S0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1925-06-26
Last Observed: 1925-06-26 ***First Observed:*** 1925-06-26 ***Precision Code:*** M
Min Elev. (m): 1130 ***Max Elev. (m):*** 1130 ***Best Source of Info:*** S25MALUCABCA21
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S25MALNMONCA34 Malte, M.O. & W. Watson NM 10246 1925-06-26
S25MALUCABCA21 Malte, M.O. & W. R. Watson UC 05824 1925-06-26
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 286350 5485600 5 1333
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1945-07-07
Last Observed: 1945-07-07 ***First Observed:*** 1945-07-07 ***Precision Code:*** S
Directions: Bow River Valley; Pipestone Creek, near mouth of; Lake Louise Ranger Station, near.
General Description: edge of muddy pond
Min Elev. (m): 1555 ***Max Elev. (m):*** 1555 ***Best Source of Info:*** S45PORNMONCA67
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45PORNMONCA67 Porsild & Breitung NM 289644 1945-07-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82N08 11 557050 5697400 Lake Louise 60 1752
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1941-08-20
Last Observed: 1941-08-20 ***First Observed:*** 1941-08-20 ***Precision Code:*** M
General Description: Open place in pine woods
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585 ***Best Source of Info:*** S41MOSACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S41MOSACONCA02 Moss, E.H. AC none 1941-08-20
S41MOSUAABCA04 Moss, E.H. UA 4572 1941-08-20
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716950 5446550 Red Rock Canyon 207 597
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1995-08-31
Last Observed: 1995-08-31 ***First Observed:*** 1995-08-31 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 10 km WSW of; Medicine Lodge Creek Coulee. West side of
General Description: Submesic sandy loam of coulee basin plain with mixed meadow of Poa pratensis - Stipa curtiseta - Agropyron smithii - Achillea millefolium - Artemisia ludoviciana
Min Elev. (m): 1138 ***Max Elev. (m):*** 1138
Other Comments: Lat/Long do not correspond with elevation ***Best Source of Info:*** S95MACPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA01 Macdonald, I.D. PM B96.1.11 1995-08-31 Y capsules present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 542374 5496481 Eagle Butte Site 59; 49 37/110 24; LSD 9 23 119
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1995-09-12
Last Observed: 1995-09-12 ***First Observed:*** 1995-09-12 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 10 km WNW of; Cypress Hills plateau, W of.
General Description: Submesic fine sandy loam of ground moraine slope with shrubby mixed meadow of Rosa arkansana - Festuca campestris -Danthonia californica - Galium boreale - Agropyron trachycaul...
Min Elev. (m): 1111 ***Max Elev. (m):*** 1111 ***Size of Occurrence:*** ***Best Source of Info:*** S95MACUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACUAABCA04 Macdonald, I.D. UA none 1995-09-12 Y [fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 542374 5504481 Ventre Creek Site 105; 49 41/110 24; LSD 9 27 123
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1974-08-09
Last Observed: 1974-08-09 ***First Observed:*** 1974-08-09 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Beauvais Lake P.P.
General Description: Pond margin.
Min Elev. (m): 1524 ***Max Elev. (m):*** 1524 ***Best Source of Info:*** S74DANUCABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74DANUCABCA12 Danielson, Barbara & Susan Crack UC 05823 1974-08-09 Y headed
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 710300 5477675 Beauvais Lake P.P. 49 25/114 06; 29-5-1 W5 3 691
Juncus confusus few-flowered rush SRank: S2S3
+++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1992-07-23
Last Observed: 1992-07-23 ***First Observed:*** 1992-07-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Writing-on-Stone PP, 9 km SSE of; Police Creek, headwaters tributary of.
General Description: mixed grassland; dry rolling prairie - coulee basin; moist seepage meadows of Carex-Epilobium-Eleocharis
Min Elev. (m): 1143 ***Max Elev. (m):*** 1212 ***Best Source of Info:*** S92MACPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92MACPMABCA04 Macdonald, I.D. PM B93.5.26 1992-07-23 Y capsules present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 456424 5427334 Police Creek 6-1-12 W4M; 49 00/111 36 29 77
Juncus confusus few-flowered rush SRank: S2S3
+++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Seven Persons; ~22.5 km SE of; Bullshead Creek; ~5km W of.
General Description: Local. Depressions in fescue grassland. 10 m E of RoW. Population avoided.
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 519300 5516650 Bullshead Creek LS#50;km:333.2;LLD:SE 10 10-6-4 13 3999
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
+++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Peigan Creek; 5km N of; Rush Lake; 2.2km S of.
General Description: Local. Depressions in fescue grassland.
Min Elev. (m): 1074 ***Max Elev. (m):*** 1074 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 525724 5500931 Buffalo Lake KP 350.6, NE 10-20-8-5-4, LS # 53/LS#53, km:350.1,LLD:NE 20 8-5-4. 7 3983
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
+++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Rush Lake; ~5km Se of bridge over E end of; Buffalo Lake; ~3.75km NW of; road; ~300m W of.
General Description: Local. Depressions in fescue grassland. In sod salvage site #1.
Min Elev. (m): 1082 ***Max Elev. (m):*** 1082 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 527574 5498081 Buffalo Lake LS#53, km:354.2,LLD:NE 16-9 8-5-4 15 4000
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
+++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Rush Lake; 7.5km SE of bridge over E end of; Buffalo Lake; 1.75km SW of.
General Description: Locally common. Wetlands. 1 m W of RoW near stringing truck turn-around. Population avoided. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 529274 5495581 Buffalo Lake LS#54,km:357.2,LLD:SE 1-3 8-5-4 5 3957
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Lodge Creek; ~ 8km W of; end of Suiste Coulee; ~4.5km W of; Lake at beginning of Bare Creek; ~2km W of.
General Description: Locally common. Wetlands. On E edge of Row. Population avoided by construction.
Min Elev. (m): 1181 ***Max Elev. (m):*** 1181 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 541000 5476175 Suiste Coulee LS#57,km:380,LLD:SE 7-2 6-4-4,SE2 6-4-W4. 16 4001
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Rosyth; ~3.25km SW of; Battle River; ~3.75km E of.
General Description: Locally common. Wetlands. RoW re-routed to avoid population.
Min Elev. (m): 655 ***Max Elev. (m):*** 655 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 482500 5829800 Rosyth LS#1;km0.8;LLD:NE 15-17 42-9-4 3 4004
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1997-06-17
Last Observed: 1997-06-17 ***First Observed:*** 1997-06-17 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Majors Lake, 10.75 km NE of; Bigstone, 9 km E of.
General Description: gently sloping, grassy swale in dry mixed grass; Care pen-Dant int, Agro tra var uni, Junc bal, Gale bor, Arn sor, Peus pro, Sisy mon, Ache mil, Thal ven, Symp occ; mesic; 3 deg. slope
Min Elev. (m): 838 ***Max Elev. (m):*** 838
Slope: 3.00 ***Aspect:*** W ***Size of Occurrence:*** ***Best Source of Info:*** U99GOL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M03 12 496000 5672850 Bigstone 16-9-26-8-W4M; 51 12.590' N, 111 03.242' W 5 5504
Source Code Author Publisher Year Title
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way
Date Source Abstract Code Observer Occurrence Data
1997-06-17 U99GOL02ABCA ~20, 10 on RoW
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 021 ***Survey Date:*** 1997-06-17
Last Observed: 1997-06-17 ***First Observed:*** 1997-06-17 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Cereal, 17. 5 km SW of; Hwy 886, 7.5 km W of.
General Description: shallow, E-W drainage in upland; mesic; Symp occ, Rosa woo/ Poa prat; Pot gru-Tara off-Gale loor-Ache mil-Coll lin
Min Elev. (m): 777 ***Max Elev. (m):*** 777 ***Size of Occurrence:*** ***Best Source of Info:*** U99GOL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M07 12 506300 5680000 Highway 886 3-3-27-7-W4M; 51 16.333N, 111 11.516 W 1 5505
Source Code Author Publisher Year Title
U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering System Pipeline right of way
Date Source Abstract Code Observer Occurrence Data
1999-06-17 U99GOL02ABCA 100-200 vegetative and budding
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 022 ***Survey Date:*** 1999-07-15
Last Observed: 1999-07-15 ***First Observed:*** 1999-07-15 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Elkwater, 4.5 km SE of; Hwy 41, E side of.
General Description: in Festuca campestris-Potentilla fruticosa herbaceous community near wetland on the plateou; mesic
Min Elev. (m): 1440 ***Max Elev. (m):*** 1440
Slope: 0.00 ***Aspect:*** 0
Other Comments: Specimen has been collected, collection number CB0012.
Management Comments: grazing by livestock; recreation ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 554200 5496600 "Spring Creek Ranger Station" 5-8-2 W4M; 12U WL 554 230/5496 620 NAD27 90 5541
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-15 U99BRA01ABCA Cheryl Bradley and Wynne Miles several plants; unsure it J. confusus at time and it was snowing; V6 vegetative; R7 reproductive
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 023 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1999-08-16 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Elkwater, 6 km SE of; Hwy 41, 3 km E of.
General Description: depressional area on upland plain; early season moisture - drying later in season; mesic
Min Elev. (m): 1440 ***Max Elev. (m):*** 1440
Slope: 0.00 ***Aspect:*** 0
Other Comments: Specine has been collected, collector number 014. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 557050 5496975 "Graburn Road" 4-8-2 W4M 91 5542
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-16 U99BRA01ABCA Reg Ernst population information not recorded - estimated <25; V6 vegetative; R7 reproductive
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 024 ***Survey Date:*** 1999-07-14
Last Observed: 1999-07-14 ***First Observed:*** 1999-07-14 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Reesor Lake, 4 km SW of; "Police Point Road", 2 km N of.
General Description: in Festuca campestris-Danthonia spp.-Carex aenea herbaceous community near top of slope in small drain and in Festuca campestris-Festuca idahoensis-Potentilla fruticosa herbaceous community; mesic
Min Elev. (m): 1410 ***Max Elev. (m):*** 1410
Slope: 10.00 ***Aspect:*** E
Other Comments: Specimen has been collected, collector numbers CB0010 and CB0011; aspect E & S; slope 5-10%.
Management Comments: livestock grazing ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 561700 5498675 "Police Point Road" 15-12-8-2 W4M; UTM 12U 561 900/5498 650 and 562 090/5499 250 NAD27 92 5543
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-14 U99BRA01ABCA Cherly Bradley and Wynne Miles main dot - two populations with several individuals noted; may be others; one population at W end of drain and one on N side ca 50 m to the E; V6 vegetative; R7 reproductive; stil somewhat too early to differenciate from Juncus tenuis based on capsule; place 2 - several individuals noted along ca 20 m of cattle trail; V6 vegetative; R7 reproductive
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 025 ***Survey Date:*** 1999-07-27
Last Observed: 1999-07-27 ***First Observed:*** 1999-07-27 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Graburn Creek, headwaters of; N side of.
General Description: well drained ephemeral drainage leading to riparian area; submesic
Min Elev. (m): 1385 ***Max Elev. (m):*** 1385
Slope: 10.00 ***Aspect:*** N
Other Comments: Slope less than 10%. Specimen has been collected, collector number RE0017. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 567625 5495350 "Kneehill Creek" 34-7-1 W4M 82 5531
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-27 U99BRA01ABCA Reg Ernst population information not recorded - estimated <25; V6 vegetative; R7 reproductive
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 026 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1999-07-27 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Nine Mile Creek, headwaters of.
General Description: ephemeral drainage adjacent to creek; submesic
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370
Slope: 10.00 ***Aspect:*** E
Other Comments: Specimens have been collected, collector numbers RE0018 & 0018A. Slope less than 10%. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 569225 5494225 Nine Mile Creek 26(wrong)-7-1 W4M 93 5544
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-16 U99BRA01ABCA Reg Ernest population information not recorded - estimated <25; V6 vegetative; R7 reproductive
Juncus confusus few-flowered rush SRank: S2S3
++++++++++++++++++++++

Element Code: PMJUN010S0 ***Occurrence Code #:*** 027 ***Survey Date:*** 2000-08-23
Last Observed: 2000-08-23 ***First Observed:*** 2000-08-23 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Altario, 6 km SE of
General Description: edge of fescue grassland, willow and ephemeral wetland
Min Elev. (m): 716 ***Max Elev. (m):*** 724
Other Comments: 30 few-flowered rush (Juncus confusus) at 563324E, 5750054N, Area A ***Best Source of Info:*** U00WAL03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 563324 5750054 Altario 1-9-34-1-W4M 6 6302
Source Code Author Publisher Year Title
U00WAL03ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Natural Features Assessment, Proposed Well and Access Route Penn West Petroleum. 1-9-34-1-W4M
Juncus confusus few-flowered rush SRank: S2S3

Juncus nevadensis **Nevada rush**

Natural Region: Foothills Fescue Grassland, Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in July?
Specific Search Strategies (if any): a dot in Moss is not listed below; habitat suspected to be spring/seepage areas, likely growing near flowing water edges

Element Occurrences:

Element Code: PMJUN011Z0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1947-08-16
Last Observed: 1947-08-16 ***First Observed:*** 1947-08-16 ***Precision Code:*** M
Directions: Cypress Hills; Spring Creek Ranger Station.
Min Elev. (m): 1424 ***Max Elev. (m):*** 1424
Other Comments: Coll. as saximontana; Rev. Boivin, 1972; Stet. Harms, 1985. ***Best Source of Info:*** S47BREACONCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S47BREACONCA05 Breitung AC 726334 1947-08-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 552700 5496400 Spring Creek Ranger Station 16 112
Juncus nevadensis Nevada rush SRank: S1

Lilaea scilloides flowering-quillwort

Natural Region: Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: heads out in July
Specific Search Strategies (if any): detectable into late September and October provided there has been no grazing; check just below high water line on mud flats without continuous vegetation and in shallow water

Element Occurrences:

Element Code: PMJCG01010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1950-08-01
Last Observed: 1950-08-01 ***First Observed:*** 1943-07-13 ***Precision Code:*** M
Directions: Manyberries, 8 mi S of.
General Description: Saline slough with Hordeum, Eleocharis and Iva spp. Usually with water in spring.
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S43SKOUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S43SKOACONCA01 Skogland, N.A. AC 51447 1943-07-20
S43SKOACONCA02 Skogland, N.A. AC 51445 1943-07-20
S43SKOUAABCA01 Skoglund, N.A. UA 978 1943-07-20
S43SKOUAABCA02 Skoglund, N.A. UA 980 1943-07-13
S50HUBACONCA01 Hubbard, W.A. & Smoliak, S. AC 51448 1950-08-01
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 520523 5456933 Manyberries 1 82
Date Source Abstract Code Observer Occurrence Data
Flowers and fruits
Lilaea scilloides flowering-quillwort SRank: S1
++++++++++++++++++++++

Element Code: PMJCG01010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1950-08-07
Last Observed: 1950-08-07 ***First Observed:*** 1950-08-07 ***Precision Code:*** M
Directions: Craigower vicinity.
General Description: Slough, in association with Hordeum and Eleocharis.
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** S50HUBUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50HUBUAABCA01 Hubbard, W.A. & Smoliak, S. UA 981 1950-08-07 Fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 534823 5440534 Craigower Vicinity 5 16
Lilaea scilloides flowering-quillwort SRank: S1
++++++++++++++++++++++

Element Code: PMJCG01010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1951-08-15
Last Observed: 1951-08-15 ***First Observed:*** 1951-08-15 ***Precision Code:*** M
Directions: Cypress Hills, top of; Elkwater, above
General Description: Mud flat, border of pond with Allocarya californica (= Plagiobothrys scouleri); fescue prairie area.
Min Elev. (m): 1430 ***Max Elev. (m):*** 1430
Other Comments: 2 duplicate sheets with same Acc.# ***Best Source of Info:*** S51MOSUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51MOSACONCA10 Moss, E.H. AC 51446 1951-08-15
S51MOSACONCA11 Moss, E.H. AC 51449 1951-08-15
S51MOSUAABCA05 Moss, E.H. UA 33299 1951-08-15 Mainly fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 553873 5497031 Elkwater 18 114
Lilaea scilloides flowering-quillwort SRank: S1
++++++++++++++++++++++

Element Code: PMJCG01010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1998-09-23

Last Observed: 1997-07-09 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.

General Description: 8 off RoW in wetland

Min Elev. (m): 808 ***Max Elev. (m):*** 808 ***Best Source of Info:*** U97AXY03ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908

Source Code Author Publisher Year Title

U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline

Lilaea scilloides flowering-quillwort SRank: S1

++++++++++++++++++++++

Element Code: PMJCG01010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-07-09

Last Observed: 1997-07-09 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: S Saskatchewan River; ~7km S of; Creek in Bull Springs Coulee; ~1km W of.

General Description: 100+ in second wetland, Depression seasonally flooded, ecotone just below high water line mud flats without continuous vegetation.

Min Elev. (m): 762 ***Max Elev. (m):*** 762

Other Comments: specimen collected; appears to be a stable population, ***Best Source of Info:*** U97AXY03ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18 3911

Source Code Author Publisher Year Title

U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline

Date Source Abstract Code Observer Occurrence Data

1997-07-09 U97AXY03ABCA vegetative, flowering, fruiting

Lilaea scilloides flowering-quillwort SRank: S1

++++++++++++++++++++++

Element Code: PMJCG01010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1999-07-14

Last Observed: 1999-07-14 ***First Observed:*** 1999-07-14 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S

Directions: Cypress Hills P.P.; Ressor Lake, 4 km SW of; Battle Creek, 1.5 km E of.

General Description: wetland, in shallow open water 30 cm deep; scattered throughout a sparse Glyc gra-Alop aeq-Lemna herbaceous community; assocciated species Eleo pal, Rume -, Plag slo

Min Elev. (m): 1410 ***Max Elev. (m):*** 1410

Slope: 0.00 ***Aspect:*** 0 ***Size of Occurrence:*** 0.02

Other Comments: specimen has been collected by Chery Bradley, collector number CB0009

Management Comments: Livestock grazing; avoid severe trampling by cattle. ***Best Source of Info:*** U99BRA01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E09 12 561500 5498850 Battle Creek 15-12-8-2-W4M 68 5517

Source Code Author Publisher Year Title

U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms

Date Source Abstract Code Observer Occurrence Data

1999-07-14 U99BRA01ABCA Cherly Bradley & Wynne Miles ca 300 plants in shallow water at N edge of wetland, along 35 m of shoreline, extending out to 5 m; V6 vegetative; R5-6 reproductive, some plants in flower

Lilaea scilloides flowering-quillwort SRank: S1

Linanthus septentrionalis linanthus

Natural Region: Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: typically late May to mid-June but may be later with delayed rains
Specific Search Strategies (if any): moist swales in sandy grassland, especially where there are small disturbances creating bare soil; occasionally spreading into a variety of sandy sites in wet years

Element Occurrences:

Element Code: PDPLM09120 ***Occurrence Code #:*** 001 ***Survey Date:*** 1969-06-23
Last Observed: 1969-06-23 ***First Observed:*** 1969-06-23 ***Precision Code:*** S
Directions: Red Rock, 1 mile NW of.
General Description: Damp grassy slope
Min Elev. (m): 1680 ***Max Elev. (m):*** 1680 ***Aspect:*** SW ***Best Source of Info:*** S69BLANMONCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S59BLAUAABCA01 Blais, W. & J. Nagy UA 45956 1959-06-23 Y flowers
S69BLANMONCA36 Blais, W. & Nagy NM 340350 1969-06-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716000 5447450 Red Rock Canyon 49 08/114 02 141 569
Linanthus septentrionalis linanthus SRank: S2
+++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 002 ***Survey Date:*** 1937-07-19
Last Observed: 1937-07-19 ***First Observed:*** 1937-07-19 ***Precision Code:*** M
Directions: Hillcrest
General Description: Mountain side
Min Elev. (m): 1980 ***Max Elev. (m):*** 1980 ***Best Source of Info:*** S37DIXUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S37DIXUAABCA02 Dixon, R.H. UA 14664 1937-07-19
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 686950 5490850 Hillcrest Mountain 17 835
Linanthus septentrionalis linanthus SRank: S2
+++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 003 ***Survey Date:*** 1970-05-31
Last Observed: 1970-05-31 ***First Observed:*** 1970-05-31 ***Precision Code:*** M
Directions: Lake Newell, East side of. Kinbrook Island Provincial Park
General Description: Pasture Land
Min Elev. (m): 760 ***Max Elev. (m):*** 760 ***Best Source of Info:*** S70HALUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70HALUCABCA01 Hallworth, B.M. UC 21847 1970-05-31
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L05 12 435400 5588750 Kinbrook Island Provincial Park 1 183
Linanthus septentrionalis linanthus SRank: S2
+++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 004 ***Survey Date:*** 1953-07-16
Last Observed: 1953-07-16 ***First Observed:*** 1953-07-16 ***Precision Code:*** M
Directions: Mount Glendowan
General Description: Disturbed soil around ground squirrel burrows.
Min Elev. (m): 1525 ***Max Elev. (m):*** 1525 ***Aspect:*** S ***Best Source of Info:*** S53BREUAABCA72
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53BREUAABCA72 Breitung, A.J. UA 14666 1953-07-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 715100 5448100 Mt. Glendowan 135 566
Linanthus septentrionalis linanthus SRank: S2
+++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-07-10
Last Observed: 1996-07-10 ***First Observed:*** 1996-07-10 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Mt. Galwey; Crandell campground, S. slope above; exclosure fence, ca. 10 m E of
General Description: seasonal seepage area over bedrock ledges in fescue grassland
Min Elev. (m): 1700 ***Max Elev. (m):*** 1700 ***Aspect:*** S ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** PNDWAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 285225 5443925 Mt. Galwey 539 1307
Linanthus septentrionalis linanthus SRank: S2
++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 006 ***Survey Date:*** 1985-05-28
Last Observed: 1985-05-28 ***First Observed:*** 1985-05-28 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Onefour, 8 km S of; Lost River, 1.5 km NE of.
General Description: seasonally moist slight depression in grassland
Min Elev. (m): 906 ***Max Elev. (m):*** 906 ***Best Source of Info:*** S85WALUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA06 Wallis, C. UA 098405 1985-05-28 Y rare; flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538625 5432975 Lost River 52 4553
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Linanthus septentrionalis linanthus SRank: S2
++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 007 ***Survey Date:*** 1990-06-23
Last Observed: 1990-06-23 ***First Observed:*** 1990-06-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chappice Lake; ~3.6km NE of; Hwy 41; ~150m W of.
General Description: Moist prairie; bottom of SW facing; down in fields. Abundant only in this area, Other species:Collomia,
Plantago patagonia,
Hedeoma.
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** S90HUDNMONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90HUDNMONCA03 Hudson, J.H. NM none 1990-06-23 corolla white; abudant just here
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L01 12 549400 5559150 Chappice Lake LSD:7 in 23-14-W of the 4th. 4 4119
Linanthus septentrionalis linanthus SRank: S2
++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 008 ***Survey Date:*** 1894-06-25
Last Observed: 1894-06-25 ***First Observed:*** 1894-06-25 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Medicine Hat; Police Point.
General Description: depressions in the prairie
Min Elev. (m): 650 ***Max Elev. (m):*** 650 ***Best Source of Info:*** S94MACNMONCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACNMONCA06 Macoun NM none 1894-06-25
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Linanthus septentrionalis linanthus SRank: S2
++++++++++++++++++++++

Element Code: PDPLM09120 ***Occurrence Code #:*** 009 ***Survey Date:*** 1989-06-27
Last Observed: 1989-06-27 ***First Observed:*** 1989-06-27 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Pakowki Sand Dunes; SW of Orion.
General Description: dry sandy prairie dominated by Stipa comata.
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Best Source of Info:*** S89HRAPMABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89HRAPMABCA06 Hrapko, J.O., Laird, L.D. PM B89.13.5 1989-06-27 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Linanthus septentrionalis linanthus SRank: S2

Lobelia spicata spiked lobelia

Natural Region: Northern Fescue Grassland
Habitat: Wetland-Meadow
Phenology: flowers in late July
Specific Search Strategies (if any): do a series of extensive searches of wetlands in this area through late July, perhaps a sandy component is required?

Element Occurrences:

Element Code: PDCAM0E190 ***Occurrence Code #:*** 001 ***Survey Date:*** 1923-07-24
Last Observed: 1923-07-24 ***First Observed:*** 1923-07-24 ***Actual Mapping Precision (m):*** 900 ***Precision Code:*** M
Directions: Clear Lake, 4.5 km WSW of; Victoria Lake, 1.5 km SE of.
General Description: low spots
Min Elev. (m): 820 ***Max Elev. (m):*** 820
Other Comments: Elevation has been changed from 777 m to 820 m. ***Best Source of Info:*** S23AHBACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S23AHBACONCA01 A.B.H. AC 1133 1923-07-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P16 12 416700 5736250 Victoria Lake Loc 3 E Sec28 32-16 W4 6 3806
Lobelia spicata spiked lobelia SRank: S1

Lomatogonium rotatum marsh felwort

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Dry Mixedgrass
Habitat: Wetland
Phenology: flowers in August
Specific Search Strategies (if any): easiest to detect when water levels are lower in August and September; springy wet meadows where there is wet soil or some standing water

Element Occurrences:

Element Code: PDGEN0C010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1987-08-15
Last Observed: 1987-08-15 ***First Observed:*** 1987-08-15 ***Precision Code:*** S
Directions: Aspen Parkland; Mirror Valley, 6 miles NNW of; Spotted Creek, tributary valley of; Walley Quapp farm.
General Description: Wet meadow
Min Elev. (m): 825 ***Max Elev. (m):*** 825 ***Best Source of Info:*** S87BIRCFABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87BIRCFABCA02 Bird, C.D. CF 80733 1987-08-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A11 12 353750 5824300 Spotted Creek 1 2321
Lomatogonium rotatum marsh felwort SRank: S2
++++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1978-08-23
Last Observed: 1978-08-23 ***First Observed:*** 1978-08-23 ***Precision Code:*** M
Directions: SW Porcupine Hills, in the; Big Coulee Creek, near.
General Description: flat, low moist open area. Other species include Juncus, hairgrass, sedges, gentians, wheatgrass
Min Elev. (m): 1355 ***Max Elev. (m):*** 1355 ***Best Source of Info:*** S78CORUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78CORUCABCA02 Corbin, J., D. Jaques, & P. Jonker UC 44419 1978-08-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O07 11 654750 5694850 Big Coulee Creek 14 2197
Lomatogonium rotatum marsh felwort SRank: S2
++++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1976-08-19
Last Observed: 1976-08-19 ***First Observed:*** 1976-08-14 ***Actual Mapping Precision (m):*** 1600 ***Precision Code:*** M
Directions: Jasper N.P.; Talbot Lake, across of NW; Jasper Lake, N side of.
General Description: brackish marsh
Min Elev. (m): 1005 ***Max Elev. (m):*** 1005 ***Best Source of Info:*** S76SHAUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76SHAJPABCA01 Sharp, D.D. JP none 1976-08-18 Y flowers, fruits
S76SHAUAABCA01 Sharp, D.D. UA 83907 1976-08-14
S76SHAUAABCA02 Sharp, D.D. UA 83908 1976-08-14
S76SHAUAABCA03 Sharp, D.D. UA 83909 1976-08-19
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83E01 11 431000 5883700 Jasper Lake Lat/Long: 53 06/118 01 43 2924
Lomatogonium rotatum marsh felwort SRank: S2
++++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1958-08-12
Last Observed: 1958-08-12 ***First Obse[illegible]*** 1958-08-12 ***Precision Code:*** M
Directions: Jasper townsite, E of.
General Description: boggy ground in river valley
Min Elev. (m): 1050 ***Max Elev. (m):*** 1050 ***Best Source of Info:*** S58MOSUAABCA15
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58MOSUAABCA15 Moss, E.H. & P. Seymour UA 14473 1958-08-12
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83D16 11 428250 5859650 Jasper Townsite 63 2862
Lomatogonium rotatum marsh felwort SRank: S2
++++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1950-08-27
Last Observed: 1950-08-27 ***First Observed:*** 1950-08-27 ***Precision Code:*** M
Directions: Jasper townsite, few mi E of; Athabasca River, near bridge on.
General Description: low, wet, calcareous area near tote road
Min Elev. (m): 1020 ***Max Elev. (m):*** 1020 ***Best Source of Info:*** S50MOSACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50MOSACONCA01 Moss, E.H. AC 148976 1950-08-27
S50MOSUAABCA04 Moss, E.H. UA 49284 1950-08-27
S50MOSUAABCA05 Moss, E.H. UA 63806 1950-08-27 Y [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83D16 11 429050 5862700 Edith Lake 91 2877
Lomatogonium rotatum marsh felwort SRank: S2
+++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1978-08-23
Last Observed: 1978-08-23 ***First Observed:*** 1978-08-23 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Oldman River & Big Coulee junction, 4.5 km N of.
General Description: Low, moist and open area; other species included: Juncus, hairgrass, sedges, gentians, wheat grasses.
Min Elev. (m): 1356 ***Max Elev. (m):*** 1356 ***Best Source of Info:*** S78JAQUCABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78JAQUCABCA04 Jaques, Dennis & Peter Jonker UC 44419 1978-08-23 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 704100 5525300 Big Coulee 11 UQF 041253 1 878
Lomatogonium rotatum marsh felwort SRank: S2
+++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 008 ***Survey Date:*** 1945-09-03
Last Observed: 1945-09-03 ***First Observed:*** 1945-09-03 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Calgary; S.A.I.T.
General Description: On the edge of a temporary slough in a grassy depression.
Min Elev. (m): 1090 ***Max Elev. (m):*** 1090 ***Best Source of Info:*** S45BARUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45BARUCABCA01 Barclay, M.B. UC 21682 1945-09-03 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 704000 5660850 Calgary - S.A.I.T. 8 1859
Lomatogonium rotatum marsh felwort SRank: S2
+++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 009 ***Survey Date:*** 1906-08-17
Last Observed: 1906-08-17 ***First Observed:*** 1906-07-18 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Irma; ~4 km SE of; Grattan Creek; ~750 m N of; CN Railline; along.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** S06MACACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S06MACACONCA01 Macoun, J, & W. Herriot AC 140414 1906-08-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D14 12 488650 5860375 Grattan Creek 3 4153
Lomatogonium rotatum marsh felwort SRank: S2
+++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 010 ***Survey Date:*** 1928-08-20
Last Observed: 1928-08-21 ***First Observed:*** 1928-08-21 ***Precision Code:*** M
Directions: Raup Lake, 3.25 km SE of.
General Description: Birch musky
Min Elev. (m): 750 ***Max Elev. (m):*** 750 ***Best Source of Info:*** S28RAUNMONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S28RAUNMONCA02 Raup, H.M. NM none 1928-08-21
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74M12 12 447175 6616075 Raup Lake 59 41N, 111 56 W 1 4079
Lomatogonium rotatum marsh felwort SRank: S2
+++++++++++++++++++++++

Element Code: PDGEN0C010 ***Occurrence Code #:*** 011 ***Survey Date:*** 1997-00-00
Last Observed: 1997-00-00 ***First Observed:*** 1955-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Penhold;alkali flat; near SE corner of.
General Description: Pakowki Lake, 3 km SE of.
Min Elev. (m): 953 ***Max Elev. (m):*** 953
Other Comments: Cattle pasture since 1948 +. Specimen collected. ***Best Source of Info:*** U97HAR02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A04 12 311225 5770900 Penhold TWP:36, RGE:27, W:4, Section:2 4 4346
Source Code Author Publisher Year Title
U97HAR02ABCA Harris,Helen and Herbert 1997 Rare Native Plant Survey Form
Lomatogonium rotatum marsh felwort SRank: S2

Lupinus minimus least lupine

Natural Region: Foothills Fescue Grassland
Habitat: Grassland
Phenology: late June-early July
Specific Search Strategies (if any): may be best included with southwest mountains work; may barely extend into the foothills fescue

Element Occurrences:

Element Code: PDFAB2B2N0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1956-07-06
Last Observed: 1956-07-06 ***First Observed:*** 1956-07-06 ***Precision Code:*** M
Directions: Coleman, about 7 mi N of; Highwood Pass Rd, Mtn W of.
General Description: stony slope
Min Elev. (m): 1980 ***Max Elev. (m):*** 1980 ***Best Source of Info:*** S56PORNMONCA19
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S56PORNMONCA19 Porsild, A.E. & Lid, L. NM 284183 1956-07-06
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 680750 5510050 Coleman 13 832
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1969-06-30
Last Observed: 1969-06-30 ***First Observed:*** 1969-05-20 ***Precision Code:*** S
General Description: open grassland on E slope; near crest; damp
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310 ***Best Source of Info:*** S69BLANMONCA41
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BLANMONCA39 Blais & Nagy NM 340025 1969-05-20
S69BLANMONCA40 Blais & Nagy NM 340024 1969-05-20
S69BLANMONCA41 Blais & Nagy NM 340001 1969-06-30
S69BLANMONCA42 Blais & Nagy NM 336080 1969-06-11
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 287550 5438000 Interpretive parking lot 134 1078
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1971-06-17
Last Observed: 1971-06-17 ***First Observed:*** 1971-06-17 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Pass Creek, 0.2 mi S of; Red Rock Canyon road and townsite, between
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280
Other Comments: id'd by Scott as L. sericeus; annot. to L. minimus by JM Gillett included in L.lepidus folder in UA herbarium with annot. label ***Best Source of Info:*** S71SCOUAABCA28
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71SCOUAABCA28 Scott, P.J. UA 37922 1971-06-17 ? flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 289600 5439500 Lonesome Lake 205 1129
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1997-06-26
Last Observed: 1997-06-26 ***First Observed:*** 1997-06-26 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: W side of Fish Lake; ~1.2km SW of.
General Description: Bearberry/ Limber pine and Rock, Dryas octopetala, Arcto. uva.,Ante., Bess wyo, Saxi bron.,Erig comp., Oxytseri. Moisture:dry. Specimen collected.
Min Elev. (m): 1626 ***Max Elev. (m):*** 1626 ***Best Source of Info:*** U97BUS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 717025 5468574 Fish Lake NW 25 4-1-5 LSD14 11U, TWP 4 RGE 1 W5M, Section 36, LSD 2-on S perimeter. 45 3899
Source Code Author Publisher Year Title
U97BUS01ABCA Bush, Dana 1997 Crowsnest pipeline survey - Rare Plant Survey Form
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 **Occurrence Code #:** 005 **Survey Date:** 1997-06-24
Last Observed: 1997-06-24 **First Observed:** 1997-06-24 **Actual Mapping Precision (m):** 250 **Precision Code:** S
Directions: Mt. Backus; between Kylo Hill and; W. Castle river; ~3km E of.
General Description: Exposed grassy ridge- E slope. Upper slopes rocky.
Min Elev. (m): 1554 **Max Elev. (m):** 1554 **Best Source of Info:** U97AXY04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 697137 5481265 Mt. Backus 49-27.24N; 114-16.793W 73 3940
Source Code Author Publisher Year Title
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 **Occurrence Code #:** 006 **Survey Date:** 1997-06-27
Last Observed: 1997-06-27 **First Observed:** 1997-06-27 **Actual Mapping Precision (m):** 250 **Precision Code:** S
Directions: S end Beauvais Lake; ~4 km SW of; Mill Creek; ~2.2 km E of.
General Description: off RoW to W on exposed ridge
Min Elev. (m): 1554 **Max Elev. (m):** 1554 **Best Source of Info:** U97AXY04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 708601 5473600 Beauvais Lake 49-22.879N; 114-7.555W 19 3916
Source Code Author Publisher Year Title
U97AXY04ABCA AXYS Environmental Consulting Ltd. 1997 Crowsnest Pipeline - CP 378
Lupinus minimus least lupine SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2B2N0 **Occurrence Code #:** 007 **Survey Date:** 1999-06-29
Last Observed: 1999-06-30 **First Observed:** 1990-06-30 **Actual Mapping Precision (m):** 25 **Precision Code:** S
Directions: Beaver Mines, 3.5 km NNW of; Mt. Backus, 3.75 km NE of.
General Description: dry, windy ridge with thin turfy topsoil. Dant par, Fest sca, Koel mac, Oxyt mon, Bess wyo, Pote coc, Ante par, Anem mul, Poa cusi. site 2- on crest of ridge with shallow turfy soil and high diversity of forbs
Min Elev. (m): 1403 **Max Elev. (m):** 1403 **Aspect:** S
Other Comments: appears to thrive in windy sites with thin turfy soil; was not found on similar ridge N of creek with thicker soils (lots of Fest sca) or higher on ridge with larger pieces of shifting shale **Best Source of Info:** U99BUS02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 699600 5482200 Mt. Backus 9-7-6-2 W5M 195 5468
Source Code Author Publisher Year Title
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-06-29 U99BUS02ABCA Dana Bush approx. 80 plants in 100 m x 100 m area. not all possib. sites checked.
Lupinus minimus least lupine SRank: S1

Lycopus americanus American water-horehound

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: late June to July
Specific Search Strategies (if any): wooded springy areas, especially within sand dune or sand plain settings; occasionally along moist riparian channels of rivers

Element Occurrences:

Element Code: PDLAM0X010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1983-07-00
Last Observed: 1983-07-00 ***First Observed:*** 1983-05-00 ***Precision Code:*** S
Directions: Wainwright Study Area
Min Elev. (m): 662 ***Max Elev. (m):*** 662 ***Best Source of Info:*** R84FEH01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 525500 5826000 David Lake Vegetation Plot AF83043 & 45 13 280
Source Code Author Publisher Year Title
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1983-07-00
Last Observed: 1983-07-00 ***First Observed:*** 1983-05-00 ***Precision Code:*** S
Directions: Wainwright Study Area.
Min Elev. (m): 659 ***Max Elev. (m):*** 659 ***Best Source of Info:*** R84FEH01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 525400 5825700 David Lake Veg. plot AF83045. 32 299
Source Code Author Publisher Year Title
R84FEH01ABCA Fehr, A.W. Alberta Energy and Natural Resources 1984 Wainwright Study Area: A Biophysical Inventory ***Lycopus americanus*** American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1973-07-14
Last Observed: 1973-07-14 ***First Observed:*** 1973-07-14 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Wainwright area; Arm Lake
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Best Source of Info:*** S73KLAUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73KLAUAABCA02 Klar, Andrew UA 80426 1973-07-14 Y buds, flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 528000 5843000 Arm Lake 52 44/110 35 37 304
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1976-07-00
Last Observed: 1976-07-00 ***First Observed:*** 1976-07-00 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Canadian Force Base Suffield; Drowing Ford.
General Description: Moist depression near the edge (low banks) of the river.
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** S76JAQUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76JAQUCABCA02 Jaques, D. & J. Corbin UC 42849 1976-07-00 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 529950 5589700 Drowning Ford 50 27/110 34 1 186
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1957-07-31
Last Observed: 1957-07-31 ***First Observed:*** 1940-08-30 ***Precision Code:*** M
Directions: North Saskatchewan River; near mouth of Sturgeon River
General Description: shore
Min Elev. (m): 587 ***Max Elev. (m):*** 602 ***Best Source of Info:*** S57TURACONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S40TURACONCA01 Turner, G.H. AC 419148 1940-08-30
S40TURACONCA02 Turner, G.H. AC 419147 1940-08-30
S41TURACONCA05 Turner, G.H. AC 419150 1941-07-21
S57TURACONCA03 Turner, G.H. AC 419152 1957-07-31
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H14 12 357000 5960000 Sturgeon River 1 3360
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Bassano, 15 km E of; CPR, 3.5 km N of.
General Description: creek margin; marsh fringe; flat alkaline plain with creek; along shoreline; hygric marsh of Wire Rush, Common Tall Manna Grass, Woolly Sedge, Tufted Hair Grass, Foxtail Barley, Sandbar Willow
Min Elev. (m): 747 ***Max Elev. (m):*** 747
Other Comments: over 20 plants in a 0.5X15m area
Management Comments: grazing pressure may reduce or destroy population; alteration of drainage pattern ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I16 12 412450 5629000 Bassano SE 26/ SW 25 21-17-4 1 4621
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Medicine Hat, 20 km NNE of city center; South Saskatchewan River, ravine of
General Description: ravine basin, subhygric loam, in a wet meadow with tall shrubs of River Birch, Yellow Willow, Wolly Sedge, Northern Willowherb, Wild Licorice, Late Goldenrod, Narrow-leaved Goldenrod [community SF6-F1]
Min Elev. (m): 736 ***Max Elev. (m):*** 736
Other Comments: approx. 20 plants along the stream course in a 3X20 m area
Management Comments: grazing pressure may reduce or destroy population; alteration of drainage pattern ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 526800 5561200 Old Channel Lake NE 28-14-5-4 27 4228
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 008 ***Survey Date:*** 1994-08-29
Last Observed: 1994-08-29 ***First Observed:*** 1994-08-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Medicine Hat; 46km N of, Fish Creek Area; Francis Peak, 6 km SE of
General Description: river back slope, submesic meadow of Agro tra, Ascl spe, Xant str, Elym can, Soli gig, Glyc lep, Lyco asp, Poa com, Arte abs.
Min Elev. (m): 615 ***Max Elev. (m):*** 635 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA26 Macdonald, I.D. PM B94.4.634 1994-08-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 528500 5579400 Twin Peaks UTM WL ca 528500 / 5579400; 50-22'05"N/110-35'55"W 14 199
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 009 ***Survey Date:*** 1994-06-18
Last Observed: 1994-06-18 ***First Observed:*** 1994-06-18 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Medicine Hat; 70 km NNE of; Ypres Area; Dishpan Lake; 9 km E of.
General Description: eroded slope; hygric runoff slope meadow of Carex aquatilis; Juncus balticus; J.longistylis; Poa palustris.
Min Elev. (m): 595 ***Max Elev. (m):*** 670
Other Comments: Duplicate sheet with same coll # Access # B94.4.129B. ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA22 Macdonald, I.D. PM B94.4.129A 1994-06-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 542500 5603400 Middle Sand Hills 50-34'55"N/110-24'05"W 1 215
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 010 ***Survey Date:*** 1994-06-20
Last Observed: 1994-06-20 ***First Observed:*** 1994-06-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; 47 km N of Medicine Hat; Ypres Area; 4 km S of Watching Hill; vicinity of Sherwood Forest.
General Description: rip backshore slope, subhygric successional meadow of Agro rep, Poa pal, Phal aru, Sali exi, Pote ans, Care lan, Equi arv, Scir pun, Ment arv, L. ame, Lyco asp.
Min Elev. (m): 615 ***Max Elev. (m):*** 615 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA23 Macdonald, I.D. PM B94.4.221A 1994-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 011 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; 22km NNE of Medicine Hat; Fish Creek Area; Bull Pen;.
General Description: backshore of River terrace, subsuccessional meadow of Agro tra, Hord jub, Equi lae, Xant str, Phal aru, Ment arv, Soli gig, Ascl spe, Medicago.
Min Elev. (m): 630 ***Max Elev. (m):*** 630
Other Comments: Duplicate sheet with same coll#. Access # B94.4.371B ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA24 Macdonald, I.D. PM B94.4.371A 1994-06-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 012 ***Survey Date:*** 1994-07-08
Last Observed: 1994-07-08 ***First Observed:*** 1994-07-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield: Medicine Hat, 33 km N of; Fish Creek Area; Van Will Corral, 5 km E of.
General Description: gently rolling moraine plain shallow depression, submesic intermittent marsh of Hordeum jubatum, Carex brevoir, Rumex stenophyllus, Lycop americanus
Min Elev. (m): 620 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA25 Macdonald, I.D. PM B94.4.575 1994-07-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 013 ***Survey Date:*** 1996-08-10
Last Observed: 1996-08-10 ***First Observed:*** 1996-08-10 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Acheson, 3 km SW of; Hwy 60, 1.5 km W of; "Acheson Pond".
General Description: shore of sinkhole pond containing Wolffia borealis and W. columbiana
Min Elev. (m): 709 ***Max Elev. (m):*** 709 ***Aspect:*** SE ***Best Source of Info:*** S96COTPPABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S96COTPPABCA05 Cotterill, P.J. PP 003532 1996-08-10 Y several clumps
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 315250 5934475 Acheson SE 32-52-26-W4M; 12U UQ 315300E 5934500N 19 4861
Lycopus americanus American water-horehound SRank: S2
++++++++++++++++++++++

Element Code: PDLAM0X010 ***Occurrence Code #:*** 014 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4
General Description: coulees along valley of S. Sask. River; woodland vegetation at edges of slightly saline springs
Min Elev. (m): 640 ***Max Elev. (m):*** 640
Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells
Management Comments: heavy grazing at one spring; petroleum dev't in adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report in-house
Lycopus americanus American water-horehound SRank: S2

Lysimachia hybrida

Natural Region: Northern Fescue Grassland, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers in early to mid-July
Specific Search Strategies (if any): tall shrubbery or woodland at edge of water; shallow wetland edges; typically with some sandy component

Element Occurrences:

Element Code: PDPRI070A0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1974-07-19
Last Observed: 1974-07-19 ***First Observed:*** 1974-07-19 ***Precision Code:*** S
Directions: Oyen, 3 km N of town
Min Elev. (m): 770 ***Max Elev. (m):*** 770
Other Comments: ssp. hybrida ***Best Source of Info:*** S74KLAUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74KLAUAABCA02 Klar, Andrew UA 80224 1974-07-19 Y [flowers, developing fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M08 12 536950 5692450 Oyen 51 23/110 28 1 259
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1956-07-19
Last Observed: 1956-07-19 ***First Observed:*** 1956-07-19 ***Precision Code:*** M
Directions: Vermillion, 20 miles south of
General Description: damp edge of pond
Min Elev. (m): 670 ***Max Elev. (m):*** 670
Other Comments: ssp. hybrida ***Best Source of Info:*** S56BIRUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S56BIRUAABCA01 Bird, C.D. UA 21315 1956-07-19 Y [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E02 12 507900 5882050 Aubumdale 1 323
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 200 ***Precision Code:*** S
Directions: Hilliard, 4 km SSE of; Mundare, 8 km W of.
General Description: samll aspen stand <20X20 m in size; moister portion of satnd; trees young
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H09 12 402800 5940400 Hilliard Site #91b (old route); KP 711.12; SE29-53-17 W4M 1 3248
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-07-16
Last Observed: 1996-07-16 ***First Observed:*** 1996-07-16 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Vegreville, 6.5 km S of; then E 1 km; at northwest edge of site; 70 (decl. 12E) plus 40 m from N gatepost of compressor station.
General Description: moist depression; no stending water July 16, 1996; sandy loam range type; mid range condition
Min Elev. (m): 647 ***Max Elev. (m):*** 647 ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H08 12 431850 5920000 Vegreville Site #96c (old route); KP 747.4; LSD2 SE29-51-14 W4M 1 3247
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Date Source Abstract Code Observer Occurrence Data
M97SAE01ABCA plant in flower and fruit; exellent vigour; samll, dense clump of between 50-75 plants
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Innisfree, 14 km SW; Hwy 36, 250 m E of.
General Description: in depresion in cultivated field in wet willows to the east.
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E05 12 448450 5905700 Birch Lake Site #100a (off-line); KP 769.9-700.0; NW12-50-13 W4M 5 328
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1997-07-13
Last Observed: 1997-07-13 ***First Observed:*** 1997-07-13 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: St. Lawrence Lake; 5.5km N of.; AB/SK border, 1km W of.
General Description: In an ephemeral (currently dry) drainage in an aspen stand. Associated with willow sp., narrow-leaved meadowsweet, sow-thistle sp. and smooth brome.
Min Elev. (m): 686 ***Max Elev. (m):*** 686
Other Comments: 31plants found altogether on the right-of-way. Two plants on the right-of-way, approx, 3-4 plants N of the existing right-of-way, & 15 plants to the SE along the proposed r.o.w. 145 other plants found to S of existing r.o.w. in aspen grove. ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D08 12 566725 5805900 St. Lawrence Lake MLKP 931.3 (KW/JL Site 23);NW36-39-1 W4M 1 3866
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Date Source Abstract Code Observer Occurrence Data
1997-07-13 M97SAE01ABCA good vigour; one in flower, one immature
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1997-07-13
Last Observed: 1997-07-13 ***First Observed:*** 1997-07-13 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: St. Lawrence Lake;6.25km N of.;AB/SK border; 1.75km W of.
General Description: In a seasonally moist aspen grove in a depression in a cultivated field. Among sedges at edge of willow community. Associated with wild mint, awned sedge and reed canary grass.
Min Elev. (m): 686 ***Max Elev. (m):*** 686
Other Comments: One plant approx. 8m S of proposed centre line (flagged). 11 off r.o.w. to the SW in an open sedge meadow. ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D08 12 566350 5806650 St. Lawrence Lake MLKP 930.7 (KW/JL Site 24); SW1-40-1 W4M 2 3867
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Date Source Abstract Code Observer Occurrence Data
1997-07-13 M97SAE01ABCA good vigour, in flower
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1997-07-13
Last Observed: 1997-07-13 ***First Observed:*** 1997-07-13 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Gillespie Lake North; 2km E of.
General Description: At the perimeter of a moist sedge meadow with awned sedge, fowl bluegrass under basket willow. The outer fringe is aspen. Associated species are smooth brome, Kentucky bluegrass and wild mint.
Min Elev. (m): 671 ***Max Elev. (m):*** 671
Other Comments: 16 plants on the NW half of the r.o.w. 5 plants found off the r.o.w. to the NE in the same habitat surrounding the same moist depression. ***Best Source of Info:*** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D08 12 557300 5816500 Gillespie Lake MLKP 918.85 (KW/JL Site 28);SW4-41-2 W4M 3 3868
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Date Source Abstract Code Observer Occurrence Data
1997-07-13 M97SAE01ABCA good vigour, in bud and flower
Lysimachia hybrida SRank: S2
++++++++++++++++++++++

Element Code: PDPRI070A0 **Occurrence Code #:** 009 **Survey Date:** 1997-07-14
Last Observed: 1997-07-14 **First Observed:** 1997-07-14 **Actual Mapping Precision (m):** 250 **Precision Code:** S
Directions: Provost; 16km NE of.; Gillespie Lake; 4km NW of.
General Description: Moist creek edge, E side. Associated with manna grass sp., water parsnip, slough grass and sanbar willow.
Min Elev. (m): 640 **Max Elev. (m):** 640
Other Comments: Patch of approx. 25 individuals 8 to 10m N of a beaver dam (12-14m N of the centreline) (flagged). No additional plants seen off r.o.w. **Best Source of Info:** M97SAE01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D08 12 552100 5816500 Provost MLKP 912.7 (KW/JL Site 28); SW4-41-2 W4M, MLKP 912.75 (KW/JL Site 28); SW 4-41-2 W4M 4 3869
Source Code Author Publisher Year Title
M97SAE01ABCA Singleton Associated Engineering & TERA Alliance Pipeline 1997 NEB Certificate Application - Volume VI - A Environmental Alignment sheets
Date Source Abstract Code Observer Occurrence Data
1997-07-14 M97SAE01ABCA good vigour, some in flower, some immature
Lysimachia hybrida SRank: S2
++++++++++++++++++++++++

Element Code: PDPRI070A0 **Occurrence Code #:** 010 **Survey Date:** 1993-08-00
Last Observed: 1993-08-00 **First Observed:** 1993-08-00 **Actual Mapping Precision (m):** 500 **Precision Code:** M
Directions: Rosyth, 4.5 km SE of; Wilkins Lake, ~4 km W of.
General Description: moist Salix community surrounding marsh, associated with Rosa acicularis, Poa palustris, Carex spp. and Mentha arvensis
Min Elev. (m): 700 **Max Elev. (m):** 700
Other Comments: Specimen has been collected by Cheryl Bradley. I.D. as L. l. ssp. hybrida **Best Source of Info:** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 487400 5828000 Rosyth NE11-42-9 W4M 7 5076
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
1993-08-00 U99WIL02ABCA Cheryl Bradley 2 to 5 plants, healthy and flowering
Lysimachia hybrida SRank: S2

Marsilea vestita hairy pepperwort

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: visible in wetland beginning late May
Specific Search Strategies (if any): exundated shores and slough bottoms; also along seasonal streams in sandy landscapes; most detectable in late June/early July

Element Occurrences:

Element Code: PPMAR01080 ***Occurrence Code #:*** 001 ***Survey Date:*** 1985-05-27
Last Observed: 1985-05-27 ***First Observed:*** 1985-05-27 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 1.3 km E of; USA border, 3.2 km N of.
General Description: dried-out slough with sandy bottom
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S85WALUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA08 Wallis, C. UA 098408 1985-05-27 Y sporocarps present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540425 5430425 Lost River SW 1-1-4 W4M 5 4
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Marsilea vestita hairy pepperwort SRank: S2
++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 002 ***Survey Date:*** 1927-07-02
Last Observed: 1927-07-02 ***First Observed:*** 1927-07-02 ***Precision Code:*** M
Directions: Brooks; roadside, irrigation system
General Description: stream
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** S27MOSUAABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S27MOSUAABCA09 Moss, E.H. UA 24 1927-07-02 Y vegetative only
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 436300 5602425 Brooks 5 236
Marsilea vestita hairy pepperwort SRank: S2
++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 003 ***Survey Date:*** 1954-07-16
Last Observed: 1954-07-16 ***First Observed:*** 1954-07-16 ***Precision Code:*** M
Directions: Monarch, 1 mi E
General Description: moist ground, near slough
Min Elev. (m): 945 ***Max Elev. (m):*** 945 ***Best Source of Info:*** S54BARALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S54BARALABCA01 Bartz, H. AL 3585 1954-07-16 Y fruiting
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 345600 5520000 Monarch 7 1396
Marsilea vestita hairy pepperwort SRank: S2
++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 004 ***Survey Date:*** 1967-08-01
Last Observed: 1967-08-01 ***First Observed:*** 1967-08-01 ***Precision Code:*** M
Directions: Welling, 3 mi north of; Hwy 5
General Description: dry slough bottom
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** S67ALLALABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67ALLALABCA05 Allen, T.D. & Gschaid AL 2155 1967-08-01 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 371150 5487425 Pothole Creek 10 1361
Marsilea vestita hairy pepperwort SRank: S2
++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 005 ***Survey Date:*** 1995-06-02
Last Observed: 1995-07-17 ***First Observed:*** 1995-06-02 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Onefour, 15 km SE of; Hwy 48, 2.70 km W of; Rd to Onefour, 150 m S of.
General Description: Small drainage with temporal ponds at base of low slope. Heavy grazing. No moisture in depressions on June 2, ponds at several locations July 17. Eleo char-Equis lae-Rum trian.
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Aspect:*** n ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Marsilea vestita hairy pepperwort SRank: S2
+++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Seven Persons; ~7.5 km NE of; Fitzgerald; ~1km SE of.
General Description: Locally abundant cultivated ephemeral wetland. RoW narrowed. No seed mix applied.
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 514317 5525795 Fitzgerald LS#49,km:322.7,NE 16-6 11-6-4. 14 4002
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Marsilea vestita hairy pepperwort SRank: S2
+++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Hwy 48, ~6km W of, Bare Creek, ~4.75 km W of.
General Description: Occasional. RoW narrowed. No seed mix applied.
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 548578 5459616 Bare Creek LS#60, km:398.8, LLD:NW 14-10 4-3-4. 17 4003
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Marsilea vestita hairy pepperwort SRank: S2
+++++++++++++++++++++++

Element Code: PPMAR01080 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Onefour; 15km SE of; Hwy 48; 2.7km W of; Rd to Onefour; 150m S of.
General Description: 10m W of RoW (1995). 10m W of RoW (1995). Population avoided.
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Aspect:*** N ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Marsilea vestita hairy pepperwort SRank: S2

Mertensia lanceolata lance-leaved lungwort

Natural Region: Foothills Fescue Grassland
Habitat: Grassland
Phenology: flowers in late May to mid-June
Specific Search Strategies (if any): perhaps best surveyed with southwest mountains rare plants

Element Occurrences:

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-05-28
Last Observed: 1986-05-28 ***First Observed:*** 1986-05-28 ***Precision Code:*** S
Directions: Turn south at T on spreadeagle road to road allowance and proceed S on road allowance to Yarrow Creek.
General Description: Gravel & cobble floodplain-very open vegetation consisting of Lupinus sericeus primarly & Phaselia hastata, Astragalus aborginium, Artemisia michauxiara & Hedysarum sulphurescens.
Min Elev. (m): 1636 ***Max Elev. (m):*** 1636 ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 283850 5456000 Yarrow Creek 49 13/113 58 68 1030
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
Total of 1,000 steams in no more then 20 clumps - 50 to 75 in larger clumps, 25 in smaller. Clumps 20-25m apart in area 200m x 50m. Population continues north and south 1-2km in discontinuous patches.
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1986-07-12
Last Observed: 1986-07-12 ***First Observed:*** 1977-06-05 ***Precision Code:*** S
Directions: Uppermost wellsite, directly above ; old exploration road, in small gully on; last hairpin, 15 m NE of
General Description: Tussocky fescue grassland in gully, bare shale areas present, scattered plant growth including Cryptantha nubigana and Cirsium sp.
Min Elev. (m): 1815 ***Max Elev. (m):*** 1815 ***Aspect:*** S
Management Comments: Construction of existing wellshas already disturbed a considerable amount of habitat. ***Best Source of Info:*** S77KUIUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77KUIUAABCA02 Kuijt, J. & D. Coxson UA 85663 1977-06-05 [flowers]
S77KUIUAABCA06 Kuijt, J. & D. Coxson UA 89949 1977-06-05 Y Buds, flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 710400 5466200 Prairie Bluff 27 705
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
I85BRA01ABCA Bradley, C. 1985
Date Source Abstract Code Observer Occurrence Data
30-40 individuals in small gully and at least as many over the entire slope (B86WAL01ABCA); [flowers] (S77KUIUAABCA02).
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1970-06-05
Last Observed: 1970-06-05 ***First Observed:*** 1970-06-05 ***Precision Code:*** S
Directions: Mount Dungarvan ridge E. of
General Description: rocky slopes
Min Elev. (m): 2042 ***Max Elev. (m):*** 2042 ***Aspect:*** N
Other Comments: Det. as M. Longiflora Greene by J. Kuijt, annotated as M. lanceolata (PurshH) DC by John G. Packer 1976 ***Best Source of Info:*** S70KUIUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70KUIUAABCA03 Kuijt. J., M. Gadd & J. Nagy UA 45938 1970-06-05 [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 285600 5448800 Dungarvan 49 10/113 57 125 1072
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
[flowers]
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1970-06-19
Last Observed: 1970-06-19 ***First Observed:*** 1970-06-19 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Waterton Lakes N.P.; Horseshoe Basin, Mount Galwey ridge, just NE of.
General Description: rocky, alpine ridge
Min Elev. (m): 1980 ***Max Elev. (m):*** 1980 ***Best Source of Info:*** S70KUIUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70KUIUAABCA03 Kuijt. J., M. Gadd & J. Nagy UA 45938 1970-06-05 [flowers]
S70KUIUAABCA15 Kuijt, J., Gadd, M., Nagy, J. UA 45939 1970-06-19 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 285850 5445350 Horseshoe Basin 49 07/113 57 127 1074
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
[flowers]
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1966-06-16
Last Observed: 1966-06-16 ***First Observed:*** 1966-06-16 ***Precision Code:*** M
Directions: Pincher Creek Mountain, Waterton Well #19
General Description: east facing mountain slopes, oilfields
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585 ***Aspect:*** E
Other Comments: ID - M. Longiflora Greene. det. M. lanceolata July 1976. J.G. Packer ***Best Source of Info:*** S66DEVUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66DEVUCABCA03 de Vries, B.D. UC 22293 1966-06-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 713550 5464250 Pincher Creek Mountain 120 759
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1932-06-17
Last Observed: 1932-06-17 ***First Observed:*** 1932-06-17 ***Precision Code:*** M
General Description: Rocky Place
Min Elev. (m): 983 ***Max Elev. (m):*** 983 ***Best Source of Info:*** S32WHIALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S32WHIALABCA01 White, R.M. AL 572 1932-06-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H07 12 365000 5474500 Magrath 1 1343
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1969-06-03
Last Observed: 1969-06-03 ***First Observed:*** 1969-06-03 ***Precision Code:*** S
Directions: Bellevue Hill.
General Description: Open shale crest.
Min Elev. (m): 1830 ***Max Elev. (m):*** 1830 ***Best Source of Info:*** S69NAGNMONCA49
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69NAGNMONCA49 Nagy, J. & W. Blais NM 336208 1969-06-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 288000 5443400 Bellevue Hill 49 06/113 55 241 1152
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1970-06-05
Last Observed: 1970-06-05 ***First Observed:*** 1970-06-05 ***Precision Code:*** M
Directions: Mount Galwey, along trail on NE side of.
General Description: Dry steep valley
Min Elev. (m): 1830 ***Max Elev. (m):*** 1830 ***Best Source of Info:*** S70KUINMONCA20
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70KUINMONCA20 Kuijt, J., Gadd, M. & Nagy J NM 346649 1970-06-05
S70KUINMONCA21 Kuijt, J., Gadd, M. & Nagy J NM 346651 1970-06-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 286350 5448900 Oil Basin 49 09/113 56 187 1118
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1991-05-15
Last Observed: 1991-05-15 ***First Observed:*** 1990-06-03 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Reed Lake; ~5.1 km NNW of; Hwy 62 bridge (N of Reed Lake); ~2.5 km SSE of.
General Description: open, sandy grassland on N-facing slope near eroding base of rock outcropping. Partly protected grassy bank on slope above outcroppings.
Min Elev. (m): 1220 ***Max Elev. (m):*** 1235 ***Aspect:*** NNW ***Best Source of Info:*** S90THOPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90HRAPMABCA04 Hrapko, J.O., Laird, L.D. PM B90.36.15 1990-06-27 Y
S90THOPMABCA01 Thormin, T.W. PM B90.27.6 1990-06-03 Y
S91HRAPMABCA10 Hrapko, J.O., Laird, L.D. PM B91.11.1 1991-05-15 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294
Mertensia lanceolata lance-leaved lungwort SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0N0C0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1988-06-00
Last Observed: 1988-06-00 ***First Observed:*** 1988-06-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Mount Gladstone, 5 km ENE of; Whitney Creek.
General Description: in dry, grassy clearing on gravelly floodplain - Populus tremuloides/Festuca campestris community, and in montane, semiopen, well drained Pinus contorta/Festuca campestris-Vaccinium myritillus community
Min Elev. (m): 1545 ***Max Elev. (m):*** 1545 ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 706100 5467250 Whitney Creek Site #2, and between site #2 and #3. 119 5064
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
1988-06-00 U99WIL02ABCA C. Bradley & K. Wilkinson 2 plants at site between #2 and #3
Mertensia lanceolata lance-leaved lungwort SRank: S2

Muhlenbergia asperifolia scratch grass

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: heads out in late June
Specific Search Strategies (if any): search mounds and microfeatures along the edge of strongly alkali wetlands and seepages, including seasonal streams; appears to require a sandy component to the soil as well

Element Occurrences:

Element Code: PMPOA48070 ***Occurrence Code #:*** 001 ***Survey Date:*** 1965-07-00
Last Observed: 1965-07-00 ***First Observed:*** 1965-07-00 ***Precision Code:*** M
Directions: Orion
General Description: Low sandy & saline soil
Min Elev. (m): 893 ***Max Elev. (m):*** 893 ***Best Source of Info:*** S65CAMPPABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S65CAMPPABCA10 Campbell, J.A. PP 564 1965-07-00
S65CAMPPABCA11 Campbell, J.A. PP 565 1965-07-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 514073 5477782 Orion 5 86
Date Source Abstract Code Observer Occurrence Data
Rare
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 002 ***Survey Date:*** 1989-08-14
Last Observed: 1989-08-14 ***First Observed:*** 1989-08-14 ***Precision Code:*** S
Directions: Milk River Natural Area
General Description: In sandy alkali soil at edge of small blowout in mixed grassland.
Min Elev. (m): 1021 ***Max Elev. (m):*** 1021
Management Comments: Can tolerate heavy grazing. ***Best Source of Info:*** S89WALPPABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA10 Wallis, C. PP 563 1989-08-14 about 50 plants
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 518423 5433084 Milk River Natural Area LSD 10 14 25
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River break; seepage bottom
General Description: moist meadow
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 528300 5582700 Twin Peaks UTM WL 528300 / 5582700 6 191
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 004 ***Survey Date:*** 1990-07-12
Last Observed: 1990-07-12 ***First Observed:*** 1990-07-12 ***Precision Code:*** S
Directions: Turin, at; Little Bow River & Hwy #25, junction of.
General Description: In association with other alkali grasses - Distichlis stricta/Puccinellia nuttalliana etc. at base of badlands.
Min Elev. (m): 777 ***Max Elev. (m):*** 777
Other Comments: ID by K. Tannas. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 391800 5536800 Turin 5 1402
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
numerous plants; fruiting
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 005 ***Survey Date:*** 1994-07-18
Last Observed: 1994-07-18 ***First Observed:*** 1994-07-18 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: The Middle Sand Hills; White Horse Lake, 10 km SE of
General Description: sandy ground around wetland spring and seepage
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S94GENPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94GENPMABCA01 Gentle, Garry PM B94.11.443 1994-07-18 Y some emerging panicles
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 541400 5603000 Middle Sand Hills 12 226
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 006 ***Survey Date:*** 1968-07-25
Last Observed: 1968-07-25 ***First Observed:*** 1968-07-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Brooks; ~3.2km SE of; railway; along.
General Description: Open prairie along railway
Min Elev. (m): 748 ***Max Elev. (m):*** 748 ***Best Source of Info:*** S68WALACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68WALACONCA01 Walker, G. AC 586436 1968-06-25
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 439400 5599250 Brooks 10 4160
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 007 ***Survey Date:*** 1974-07-24
Last Observed: 1974-07-24 ***First Observed:*** 1974-07-24 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Horseshoe Lake, just S of.
General Description: slough edge; salt marsh
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S74KLAUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74KLAUAABCA05 Klar, Andrew UA 81103 1974-07-24 Y spikelets just emerging
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D07 12 517000 5798000 Horseshoe Lake 52 20/110 45 4 4496
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 008 ***Survey Date:*** 1986-07-28
Last Observed: 1986-07-28 ***First Observed:*** 1986-07-28 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Reflex Lakes, S shore of; border, 500 m W of.
General Description: sparsely vegetated backshore
Min Elev. (m): 600 ***Max Elev. (m):*** 600 ***Best Source of Info:*** S86WALUAABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86WALUAABCA12 Wallis, C. UA 098357 1986-07-28 Y panicles emerging
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 567000 5834000 Reflex Lakes 52 40/110 00; SE 36-42-1 W4M 5 4531
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 009 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Altario south wetlands; 2.25 km NW of Altario; Sect. 23-Tp34-R2-W4M
General Description: successive bands of halophytic vegetation along shores of hypersaline (unveget.) ponds
Min Elev. (m): 732 ***Max Elev. (m):***
Other Comments: part of nationally significant northern fescue grassland association
Management Comments: affected by heavy grazing; pumping of groundwater should not occur ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 010 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Altario north wetlands; 5.25 km NE of Altario; Sect. 31-Tp34-R1-W4M & Lakevold Springs Sect. 2 & 11-Tp35-R2-W4M
General Description: saline shores and drier spring margins
Min Elev. (m): 693 ***Max Elev. (m):*** 701
Management Comments: impact of heavy grazing; groundwater pumping should not occur ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 556000 5758550 Altario Sect. 31-Tp34-R1-W4M; Sect. 2 & Sect.11-Tp35-R2-W4M 5 5962
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 011 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: M.D. of Provost; Cadogan, 12.75 km SW of; Sect. 4,6,7 in Tp38-R4-W4M
General Description: non-saline backshore of saline ponds and alkali shores
Min Elev. (m): 648 ***Max Elev. (m):***
Management Comments: heavy grazing pressure on parts of shoreline; recommend sufficient setback to reduce adverse impacts ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D02 12 530100 5787000 Cadogan Sects. 4,6,7 in Tp38-R4-W4M (Multipolygon) 8 5975
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpublished report
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 012 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chappice Lake, Medicine Hat, NE of; Tp14-R3-W4M
General Description: upper shores of permanent hypersaline lake
Min Elev. (m): 730 ***Max Elev. (m):***
Other Comments: recommend sufficient setback; no groundwater pumping for injection wells
Management Comments: current mgmt compatible with ecosystem; concerns about loss of groundwater flows; adjacent natural gas wells ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L01 12 546050 5557450 Chappice Lake Mapped as polygon 1 4416
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl. report in-house
Muhlenbergia asperifolia scratch grass SRank: S2

Element Code: PMPOA48070 ***Occurrence Code #:*** 013 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Sounding Lake, ca. 1.5 km N of; "Greenlee Lake"; Sect. 26-Tp37-R4-W4M

General Description: semi-perm. hypersaline water body; esp. E & S shores; on higher backshores

Min Elev. (m): 600 ***Max Elev. (m):*** 655

Management Comments: threatened by oil-well development; groundwater s/b monitored for effects; protect wetland basin with sufficient setback ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D01 12 535825 5784000 "Greenlee Lake" N of Sounding Lake; mapped as polygon 1 4425

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C. Wallis See unpubl. report in-house

Muhlenbergia asperifolia scratch grass SRank: S2

++++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 014 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Leane Lake, 2.5 km SW of Dilberry Lake PP; Tp41-R1-W4M

General Description: drier outer shoreline of hypersaline, semi-permanent lake

Min Elev. (m): 587 ***Max Elev. (m):***

Other Comments: recommend retain as nat'l water body with sufficient setback

Management Comments: relat. undist. basin & shore; nearby petroleum development ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D09 12 564750 5824000 Leane Lake Tp41-R1-W4M; mapped as polygon 19 6004

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl. report in-house

Muhlenbergia asperifolia scratch grass SRank: S2

++++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 015 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Consort, 12.5 km NW of; "Neutral Hills South"; "Lake A"; Sects. 3 & 4-Tp36-R7-W4M

General Description: moist shores of hypersaline, semi-permanent ponds; and along creek

Min Elev. (m): 750 ***Max Elev. (m):*** 750

Other Comments: recommend retain as nat'l water body with suff. setack & addit'l monitoring of site to assess over time

Management Comments: locally heavy grazing along shore but otherwise compatible with ecosystem maintenance; petrol. dev't on adj. lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D02 12 503900 5768075 "Neutral Hills Lake A" 4-36-7 W4M; 110 56/52 04; UTM 503414/5767401; mapped as polygon 5 4594

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl. report

Muhlenbergia asperifolia scratch grass SRank: S2

++++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 016 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Consort, 12.5 km NW of; "Neutral Hills South"; "Lake B1"; Sects. 16 & 17-Tp36-R7-W4M

General Description: moist shores of hypersaline, semi-permanent ponds

Min Elev. (m): 750 ***Max Elev. (m):*** 750

Other Comments: recommend retain as nat'l water body with sufficient setback; also addit'l monitoring to assess site over time

Management Comments: locally heavy grazing along shore but mgmt mostly compatible with ecosystem maintenance; petrol. dev't on adj. lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D02 12 503825 5770150 "Neutral Hills Lake B1" 9-7-36 W4M; 52 04/110 57; 503413/5769019 ; mapped as polygon 6 4595

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01BCA C Wallis See punpul. report in-house

Muhlenbergia asperifolia scratch grass SRank: S2

Element Code: PMPOA48070 ***Occurrence Code #:*** 017 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M

General Description: vegetation around moder. saline spring and along uphill springline; rel. dry zone (farther from spring)

Min Elev. (m): 640 ***Max Elev. (m):*** 640

Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells

Management Comments: heavy cattle grazing of some springs; petroleum dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl. report in-house

Muhlenbergia asperifolia scratch grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 018 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Chauvin, 8 km SE of; Reflex Lake [Salt Lake]; Tps 42 & 43-R1-W4M

General Description: unveget. or sparsely vegetated shores of hypersaline lake; vegetation around springs

Min Elev. (m): 600 ***Max Elev. (m):*** 600

Other Comments: recommend protectn of wetland basin; no groundwater pumping; explore purchase of critical lands; fencing & grazing mgmt; exist. lease only for cottage dev't

Management Comments: cattle grazing, OHV use, expansion of recreational cottage dev't pose problems; active gas & oil wells on adj lands ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D09 12 565600 5835300 Reflex Lake Polygon 15 4598

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

U90WAL01ABCA C Wallis See unpubl report

Muhlenbergia asperifolia scratch grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 019 ***Survey Date:*** 1990-00-00

Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Metiskow, 2.5 km N of; Sunken Lake; Tp39-R5-W4M

General Description: temporary, hypersaline lake in a deep basin; rel. dry vegetation zone around lake

Min Elev. (m): 670 ***Max Elev. (m):*** 670

Other Comments: recommend: retain as nat'l water body with suff. setback; addit'l monitoring of site to assess site over time & monitor changes in grazing levels; no grundwater pumping for injection wells

Management Comments: threats due to further clearing & cultivn round lake; nearby petrol. dev't; some light grazing on backshore ***Best Source of Info:*** U90WAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

73D07 12 523550 5802000 Sunken Lake Polygon 7 4604

Source Code Author Publisher Year Title

U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta

Date Source Abstract Code Observer Occurrence Data

1990-00-00 U90WAL01ABCA C Wallis See unpubl. report in-house

Muhlenbergia asperifolia scratch grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 020 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bindloss, 8.5 km SW of Prince's Springs (formerly Bindloss Depression); Sects. 27,28,34,35-Tp21-R3-W4M
General Description: ungrazed drier area around main springs
Min Elev. (m): 617 ***Max Elev. (m):*** 617
Other Comments: recommend addtl fencing of spring-dependent vegn; protection of wetland basin; no groundwater pumping for wells; survey in wetter periods
Management Comments: threats from cattle trampling, pumping of water out of springs for cattle watering; natural gas wells on adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 546450 5629250 Bindloss Sects. 27,28,34,35-Tp210R3-W4M; mapped as polygon 33 6040
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpubl report in-house
Muhlenbergia asperifolia scratch grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA48070 ***Occurrence Code #:*** 021 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Wainwright, S of, & N of Metiskow; David Lake; Tps 41, 42-R5-W4M
General Description: lakeshore; drier, upper shore; on sandy soil
Min Elev. (m): 665 ***Max Elev. (m):*** 665
Other Comments: protect entire wetland basin with sufficient setback; reduce pressure on wet meadow cts W of David L
Management Comments: ecological reserve ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526500 5826250 David Lake 38 305
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA See unpubl report in-house
Muhlenbergia asperifolia scratch grass SRank: S2

Muhlenbergia racemosa **marsh muhly**

Natural Region: Foothills Fescue Grassland, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: heads out in late June
Specific Search Strategies (if any): some taxonomic uncertainty and introgression with a more common wetland species. Search seasonal river channels for minor eroding sand ridges along the edge or within the channel as well as south-facing sandy slopes with eroding sand

Element Occurrences:

Element Code: PMPOA481D0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1978-04-09
Last Observed: 1978-04-09 ***First Observed:*** 1978-04-09 ***Precision Code:*** S
Directions: CALGARY; MACLEOD TRAIL, 0.5 MI. W. OF; FISH CREEK PROV. PARK,
General Description: DRY EXPOSED S. FACING HILLSIDE, SANDY SOIL
Min Elev. (m): 1066 ***Max Elev. (m):*** 1066 ***Aspect:*** S ***Best Source of Info:*** S78WILUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78WILUCABCA01 Wilkinson, K. UC 63225 1978-04-09
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 705200 5646200 Fish Creek Provincial Park 10 1704
Muhlenbergia racemosa marsh muhly SRank: S1
++++++++++++++++++++++

Element Code: PMPOA481D0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1943-08-27
Last Observed: 1943-08-27 ***First Observed:*** 1943-08-27 ***Precision Code:*** M
Directions: Red Deer, few miles N of; Blindman River, margin of
General Description: among bushes in sandy soil
Min Elev. (m): 846 ***Max Elev. (m):*** 846 ***Best Source of Info:*** S43MCCUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S43MCCUAABCA02 McCalla, W.C. UA 33615 1943-08-27 spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A05 12 308600 5804250 Blindman River 2 2306
Muhlenbergia racemosa marsh muhly SRank: S1
++++++++++++++++++++++

Element Code: PMPOA481D0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1968-09-03
Last Observed: 1968-09-03 ***First Observed:*** 1968-09-03 ***Precision Code:*** M
Directions: Provincial Museum Area, on bank near trail
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S68SAVPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68SAVPMABCA03 Savale, W.F. PM B68.12.12a 1968-09-03 Y fairly common; panicle present
S68SAVPMABCA06 Savale, W.F. PM B68.12.12b 1968-09-03 Y panicle present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 331575 5935150 Edmonton Lat/Long: 53 33/113 28; Lat/Long does not match location description. 10 3353
Muhlenbergia racemosa marsh muhly SRank: S1
++++++++++++++++++++++

Element Code: PMPOA481D0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1903-09-08
Last Observed: 1903-09-08 ***First Observed:*** 1900-07-21 ***Precision Code:*** M
Directions: Middle Spring
General Description: By waste water.Marsh.
Min Elev. (m): 1675 ***Max Elev. (m):*** 1675 ***Best Source of Info:*** S03SANUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S00SANNMONCA02 Sanson NM 30227 1900-07-21
S03SANUCABCA02 Sanson, N.B. UC none 1903-09-08
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O04 11 599300 5668350 Sanson Peak 182 2083
Muhlenbergia racemosa marsh muhly SRank: S1
++++++++++++++++++++++

Element Code: PMPOA481D0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1965-08-00

Last Observed: 1965-08-00 ***First Observed:*** 1965-08-00 ***Precision Code:*** M

General Description: moist meadows & low ground

Min Elev. (m): 745 ***Max Elev. (m):*** 745 ***Best Source of Info:*** S65CAMPPABCA04

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S65CAMPPABCA04 Campbell, J.A. PP 566 1965-08-00

S65CAMPPABCA05 Campbell, J.A. PP 567 1965-08-00

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

83G10 11 648500 5936200 Seba Beach 15 3139

Date Source Abstract Code Observer Occurrence Data

Scattered abundance - fair forage value for game, cattle & horses.

Muhlenbergia racemosa marsh muhly SRank: S1

+++++++++++++++++++++++

Element Code: PMPOA481D0 ***Occurrence Code #:*** 006 ***Survey Date:*** 2000-09-14

Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 150 ***Precision Code:*** S

Directions: Calgary; Fairview area, E of; Bow River W side of; Cominco Lands

General Description: on smallest of river islands in a grassy, sandy dry river channel near the Bow River; dominant species in meander scar was Poa pratensis

Min Elev. (m): 1010 ***Max Elev. (m):*** 1020

Other Comments: specimens from area appear to be intermediate to provincially more common M. glomerata. 200 plants were found at NAD27 708438E 5651721N; specimen collected ***Best Source of Info:*** U00WAL04ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82J16 11 708300 5651650 Calgary 21 6303

Source Code Author Publisher Year Title

U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary

Muhlenbergia racemosa marsh muhly SRank: S1

Munroa squarrosa false buffalo grass

Natural Region: Dry Mixedgrass

Habitat: Slopes-Sandy

Phenology: heads out in July

Specific Search Strategies (if any): most easily detected in August when some drying has taken place and the plant stands out from the background vegetation; search gravelly and sandy slopes and sandy/gravelly areas along disturbances such as vehicle ruts

Element Occurrences:

Element Code: PMPOA49010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-00-00

Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S

Directions: Southern boundary of S.N.W.A., from along; Alberta Energy Company machinery compound, within,along the building and fence fringes; Gate S24, at.

General Description: Occurs on xeric to subxeric gravelly sand.

Min Elev. (m): 709 ***Max Elev. (m):*** 709

Other Comments: This population was persisting in the equipment compound through the 1994 and 1995 field season. ***Best Source of Info:*** U96MAC01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L02 12 520500 5563400 Old Channel Lake 3 170

Source Code Author Publisher Year Title

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

Date Source Abstract Code Observer Occurrence Data

rare; growing quite profusely and flowering as local carpets

Munroa squarrosa false buffalo grass SRank: S1

++++++++++++++++++++++

Element Code: PMPOA49010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00

Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S

Directions: Canadian Forces Base Suffield National Wildlife Area;South Saskatchewan River Valley, slopes of; Bull Pen, about 1.5 km W of.

General Description: Slopes of the river valley; dry gravelly and sandy ridge crests.

Min Elev. (m): 663 ***Max Elev. (m):*** 663

Other Comments: Information was cited from some C. Wallis report by I. Macdonald. ***Best Source of Info:*** U96MAC01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L07 12 524100 5566700 Brush Flats UTM WL ca 524100 / 5566700 3 188

Source Code Author Publisher Year Title

U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area

Date Source Abstract Code Observer Occurrence Data

single patch

Munroa squarrosa false buffalo grass SRank: S1

++++++++++++++++++++++

Element Code: PMPOA49010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1996-08-19

Last Observed: 1996-08-19 ***First Observed:*** 1996-08-19 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: Bull Springs Coulee, mouth of, 4 km ESE of.

General Description: edge of 5m wide water pipeline disturbance; very poor topsoil salvage; needle&thread 47%, branched pepperwort 28%, Chenopodium spp. 15%. 1plant collected

Min Elev. (m): 777 ***Max Elev. (m):*** 777

Slope: 0.00 ***Best Source of Info:*** S97GILPPABCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S96GILPPABCA01 Gill, Suzanne PP 003504 1996-08-19 Y 1 plant; vegetative

S97GILPPABCA01 Gill, Suzanne PP 003504 1996-08-19 1 plant

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L08 12 545125 5584000 White Rock Coulee NW4-17-3 W4M 10 213

Source Code Author Publisher Year Title

U96GIL01ABCA Gill, Suzanne 1996 Rare Native Plant Survey Form

Munroa squarrosa false buffalo grass SRank: S1

++++++++++++++++++++++

Element Code: PMPOA49010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1959-08-23
Last Observed: 1959-08-23 ***First Observed:*** 1959-08-23 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Many Island Lake, West side of, 7 km W of; E side of Sam Lake, 1.65 km SE of.
General Description: Dry sandy roadside on S facing slope. Other species: Chrysopsis villosa,Verbena bracteata, Salsola kali, Plantago purshii.
Min Elev. (m): 739 ***Max Elev. (m):*** 739 ***Aspect:*** S ***Best Source of Info:*** S59HUDACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S59HUDACONCA02 Hudson, T.H. AC 154081 1959-08-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L01 12 554500 5553300 Sam Lake NE1/4 32-13-II W 4th. 5 4158
Munroa squarrosa false buffalo grass SRank: S1

Nothocalais cuspidata prairie false dandelion

Natural Region: Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers late May to early June
Specific Search Strategies (if any): extensive area searches in sand plains in extreme southeastern Alberta; widespread but only as scattered individuals

Element Occurrences:

Element Code: PDAST6P020 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-06-15
Last Observed: 1989-06-15 ***First Observed:*** 1989-06-15 ***Precision Code:*** S
Directions: Milk River Natural area
General Description: Very short sandy mixed grassland
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S89WALPPABCA17
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA17 Wallis, C. PP 771 1989-06-15
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 522923 5427334 Milk River Natural Area LSD 3 17 28
Date Source Abstract Code Observer Occurrence Data
Widely scattered plants, total #'s in low 1000's
Nothocalais cuspidata prairie false dandelion SRank: S1
++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 002 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley and USA border, at.
General Description: on sandy soil on coulee slopes
Min Elev. (m): 846 ***Max Elev. (m):*** 873 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 541350 5427775 Lost River 45 4546
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Nothocalais cuspidata prairie false dandelion SRank: S1
++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 003 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River, 2 km W of; USA border, 1.5 km N of.
General Description: sandy soil
Min Elev. (m): 869 ***Max Elev. (m):*** 876 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538300 5428650 Lost River 9 8
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Nothocalais cuspidata prairie false dandelion SRank: S1
++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 004 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, W rim of; USA border, 1.3 km N of.
General Description: sandstone outcrops
Min Elev. (m): 846 ***Max Elev. (m):*** 869 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540000 5428550 Lost River 48 4549
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Nothocalais cuspidata prairie false dandelion SRank: S1
++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 005 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, W rim of; USA border, 2.7 km N of.
General Description: moist coulee grassland
Min Elev. (m): 861 ***Max Elev. (m):*** 884 ***Best Source of Info:*** U86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 539900 5429950 Lost River 50 4551
Source Code Author Publisher Year Title
U86WER01ABCA Wershler, C.R. Prepared for AB Forestry, Lands and Wildlife 1986 Lost River: Mountain Plover Study.
Nothocalais cuspidata prairie false dandelion SRank: S1
+++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 006 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 8 km S of; Lost River, 1.5 km NE of.
General Description: seasonally moist depression
Min Elev. (m): 906 ***Max Elev. (m):*** 906 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538625 5432975 Lost River 52 4553
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Nothocalais cuspidata prairie false dandelion SRank: S1
+++++++++++++++++++++++

Element Code: PDAST6P020 ***Occurrence Code #:*** 007 ***Survey Date:*** 1990-09-05
Last Observed: 1990-09-05 ***First Observed:*** 1990-09-05 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Mount Livingstone, east facing slope of
General Description: small colourful grassland with many asters, surrounded by Picea engelmannii
Min Elev. (m): 1890 ***Max Elev. (m):*** 2195
Slope: 22.00 ***Aspect:*** 95 ***Best Source of Info:*** B91TIM01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J01 11 686400 5556200 Mt. Livingstone Natural Area 49 5155
Source Code Author Publisher Year Title
B91TIM01ABCA Timoney, Kevin P. Alberta Forestry, Lands & Wildlife 44p. 1991 Biophysical Inventory of the Mount Livingstone Natural Area
Nothocalais cuspidata prairie false dandelion SRank: S1

Nuttallanthus canadensis field toad-flax

Natural Region: Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers late June
Specific Search Strategies (if any): extensive area searches on sand plains with a solonetzic component; extremely localized to minor blowouts and moister swales with exposed sandy soils

Element Occurrences:

Element Code: PDSCR2P010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Kirkpatrick Lake, ~6.5km NE of E end of; Hwy 586; ~3.5km N of.
General Description: 4 populations approx. 400 plants total. Exposed sand W of RoW. RoW narrowed.
Min Elev. (m): 777 ***Max Elev. (m):*** 777 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M14 12 488500 5748050 Kirkpatrick Lake LS#13;km:86.1;LLD: SE 2 34-9-4 1 4007
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Nuttallanthus canadensis field toad-flax SRank: S1

Oenothera flava low yellow evening-primrose

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: late June to early August
Specific Search Strategies (if any): along edges of sandy, gravelly wetlands or sandy ephemeral stream bottoms; occasionally on disturbed gravelly moist disturbances

Element Occurrences:

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1969-07-05
Last Observed: 1969-07-05 ***First Observed:*** 1969-07-05 ***Precision Code:*** M
Directions: Indian Springs Pond
General Description: pond shore of sand and fine gravel in prairie
Min Elev. (m): 1372 ***Max Elev. (m):*** 1372 ***Best Source of Info:*** S69BLAULABCA15
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BLAULABCA15 Blais, W. UL none 1969-07-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 290550 5445650 Buffalo Paddock 261 1163
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1952-08-26
Last Observed: 1952-08-26 ***First Observed:*** 1952-08-26 ***Precision Code:*** M
Directions: Empress, 2 mi SW of.
General Description: Margin of slough ***Best Source of Info:*** S52MOSUAABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52MOSUAABCA07 Moss, E.H. UA 13153 1952-08-26 one plant only; yellow flowerd; stigma 4 lobed; remains of flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 567000 5642200 Empress 1 248
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1999-06-22
Last Observed: 1999-06-22 ***First Observed:*** 1947-08-14 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S
Directions: Cypress Hills; Spring Creek Ranger Station, plateau west of [1998 - Murray Hill Rd., E of trail to dam, W end of plateau].
General Description: in middle and edge of vehicle trail; xeric
Min Elev. (m): 1365 ***Max Elev. (m):*** 1460
Slope: 20.00 ***Aspect:*** S ***Size of Occurrence:*** 0.50
Other Comments: slope less than 20%; for detailed map of plants see in electronical file of Cypress Hills.
Management Comments: Grazing and recrearional use; threats from traffic on the road and road maintenance ***Best Source of Info:*** S47BREACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S47BREACONCA01 Breitung AC 168019 1947-08-14
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 546524 5496906 Spring Creek Ranger Station LSD 14 Sec 4 and Sec 5-8-3 W4M 12 108
Source Code Author Publisher Year Title
F98ALL01ABCA Allen, Lorna 1998 Field notes: 1998 field season U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1998-07-10 F98ALL01ABCA L. Allen 1 plant noted; in middle of road which was not use for last several weeks
1999-06-22 U99BRA01ABCA Reg Ernst 50 plants, along edge of road in cobbles, with Cirsium arvense, Bromus inermis, Taraxacum officinale, Agoseris glauca; V6 vegetative; R8 reproductive
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1902-06-25
Last Observed: 1902-06-25 ***First Observed:*** 1902-06-25 ***Precision Code:*** M
Directions: Pincher Creek
Min Elev. (m): 1130 ***Max Elev. (m):*** 1130 ***Best Source of Info:*** S02XXXACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S02XXXACONCA01 Unknown AC 584946 1902-06-25
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 286350 5485600 5 1333
Oenothera flava low yellow evening-primrose SRank: S2

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Hwy 48; ~ 6 km W of; Bare Creek; ~ 4.75 km W of.
General Description: In cobble base of creek bed. RoW narrowed. No seed mix applied. Population avoided.
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 548578 5459616 Bare Creek LS#60, km:398.8, LLD:NW 14-10 4-3-4. 17 4003
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Date Source Abstract Code Observer Occurrence Data
1996-00-00 U96EXP01ABCA 20 plants on E RoW; 10 plants 40m E of RoW.
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1998-06-04
Last Observed: 1998-06-04 ***First Observed:*** 1998-06-04 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Milk River Natural Area and Kennedy Coulee Ecological Reserve, second creek crossing border.
General Description: dessicated stream channel on exundated soils; at the edge of a series of small pools (10) along channel; assoc. spp.:
Boisduvalia glabella, Collomia linearis.
Min Elev. (m): 975 ***Max Elev. (m):*** 990
Other Comments: Specimen to go into PP
Management Comments: No known threats. ***Best Source of Info:*** F98GOU01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 519073 5430784 Kennedy Creek Polygon; 49 02 02/110 44 18 36 4618
Source Code Author Publisher Year Title
F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season
Date Source Abstract Code Observer Occurrence Data
1998-06-04 F98GOU01ABCA J. Gould & D. Vujnovic 50 plants, most with flower buds
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1999-06-17
Last Observed: 1999-06-17 ***First Observed:*** 1998-06-18 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Ross Lake, 6 km S of; North Milk River, ~2.5 km N of.
General Description: along the bottom of a drainage gully; moisture moderate; Rosa arkansana, Symphoricarpos occidentalis, Salix sp.
Min Elev. (m): 1365 ***Max Elev. (m):*** 1365 ***Aspect:*** SE ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 359250 5439425 Ross Lake 5-2-22 W4M 31 5044
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
1999-06-17 U99ERN02ABCA reg Ernst blooms faded on most plants
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1998-06-18
Last Observed: 1998-06-18 ***First Observed:*** 1998-06-18 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Ross Lake, 4 km SE of; North Milk River, 3 km N of.
General Description: coulee bottom about thirds of the way up from lower grassland site along a cow path; moderate slope, dry-moderate moisture;
Festuca scabrella, Agropyron smithii, Aster spp., Madia glomerata
Min Elev. (m): 1280 ***Max Elev. (m):*** 1295 ***Aspect:*** SE ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 362400 5441850 Ross Lake 9,16-2-22 W4M 32 5045
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
1998-06-18 U98ERN01ABCA Reg Ernst 80 plants, looks like all together with EO 007; 20 vegetative, 10 flowers
1999-06-17 U99ERN02ABCA Reg Ernst blooms faded on most plants
Oenothera flava low yellow evening-primrose SRank: S2
+++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1998-07-03
Last Observed: 1998-07-03 ***First Observed:*** 1998-07-03 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Red Deer Lake, ~7 km NW of; Rapid Narrows, 6.5 km SW of; Bull Springs Coulee
General Description: on perimeter of large wetland; heavely trampled; xeric
Min Elev. (m): 745 ***Max Elev. (m):*** 745 ***Aspect:*** N ***Best Source of Info:*** U98BUS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 537300 5581000 Bull Springs Coulee LSD14-27-16-4-W4M 28 5057
Source Code Author Publisher Year Title
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1998-07-03 U98BUS01ABCA Dana Bush 1 plant early in season - barely identificable
Oenothera flava low yellow evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1990-06-19
Last Observed: 1990-06-19 ***First Observed:*** 1990-06-19 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: south end of Natural Area
General Description: eroding shales in "badlands" ***Best Source of Info:*** N90WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 546800 5491800 Eagle Nest 60 5074
Source Code Author Publisher Year Title
N90WAL02ABCA Wallis, Cliff Alberta Forestry, Lands and Wildlife 1990 Reconnaissance Special Feature Assessment SE28 and NE21-7-3-W4
Date Source Abstract Code Observer Occurrence Data
1990-06-19 N90WAL02ABCA Cliff Wallis 5 plants
Oenothera flava low yellow evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1999-08-11
Last Observed: 1999-08-11 ***First Observed:*** 1999-08-11 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.
General Description: dry mixed grass prairie: around boulder used by cattle for rubbing, in shallow edge of wetland. Weedy with >50% bare ground. Lepi den,Agro sca, Agro smi, Guit sar, Arter lud and Poly wat (rare).
Min Elev. (m): 808 ***Max Elev. (m):*** 808
Management Comments: Pipeline construction: this wetland has numerous rare species (Elan tri, Hype maj, Cent min, Lila sci, reported in 97/98 ***Best Source of Info:*** U99BUS02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908
Source Code Author Publisher Year Title
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-11 U99BUS02ABCA Dana Bush 62 plants in 3 m by 3 m area; Vegetative-6; Reproductive-10; 29 vegetative plants, 31 plants with seeds, 2 with faded blooms
Oenothera flava low yellow evening-primrose SRank: S2
++++++++++++++++++++++

Element Code: PDONA0C0E0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1999-06-24
Last Observed: 1999-06-24 ***First Observed:*** 1999-06-24 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Graburn Creek, headwaters of, top of coulee.
General Description: cobbled slopes in grassland; with Graminoids, Taraxacum officinale, Cirsium arvense; xeric
Min Elev. (m): 1400 ***Max Elev. (m):*** 1400
Slope: 10.00 ***Aspect:*** S
Other Comments: slope less than 10% ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 565825 5495750 Graburn Creek 69 5518
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-06-24 U99BRA01ABCA Reg Ernst less than 20 plants; V6 vegetative; faded blossoms, neew flower buds, some seed
Oenothera flava low yellow evening-primrose SRank: S2

Onosmodium molle western false gromwell

Natural Region: Foothills Fescue Grassland, Mixedgrass
Habitat: Woodland-Sandy
Phenology: flowers in June
Specific Search Strategies (if any): open riparian woodland and shrubbery, often in association with buckbrush; easily detectable into October

Element Occurrences:

Element Code: PDBOR0S030 ***Occurrence Code #:*** 001 ***Survey Date:*** 1954-07-02
Last Observed: 1954-07-02 ***First Observed:*** 1954-07-02 ***Precision Code:*** M
Directions: Midnapore.
General Description: Low prairie lands; sunny slope.
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044 ***Best Source of Info:*** S54HODUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S54HODUCABCA01 Hodges, K. UC 22429 1954-07-02 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 705850 5644300 Midnapore 15 1709
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 002 ***Survey Date:*** 1974-06-27
Last Observed: 1974-06-27 ***First Observed:*** 1958-07-12 ***Precision Code:*** M
Directions: Willow Creek Provincial Park, in.
General Description: grassland; association: Symph. occidentalis, Sco (?), Artemisia frigida, Glycy. lepidota, Rosa.; alluvial plain.
Min Elev. (m): 1052 ***Max Elev. (m):*** 1067 ***Best Source of Info:*** S74DANUCABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58JOHALABCA01 Johnston, A. & T. D. Allen AL 1747 1958-07-12 Y blooming
S74DANUCABCA04 Danielson, B. & S. Crack UC 22430 1974-06-27 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I04 12 302100 5554850 Willow Creek Provincial Park 50 07/113 46; 28-013-28-W4; Field No. 107. 3 1412
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 003 ***Survey Date:*** 1972-06-29
Last Observed: 1972-06-29 ***First Observed:*** 1972-06-29 ***Precision Code:*** M
Directions: Calgary; Bow River, near; Heritage Drive & 6th Str. S.E.
General Description: Gravelly thicket, partially disturbed; associated with rose, shrubby cinquefoil, weeds and other shrubs.
Min Elev. (m): 1029 ***Max Elev. (m):*** 1029
Other Comments: ID by D. Johnson ***Best Source of Info:*** S72JOHUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72JOHUCABCA02 Johnson, D. UC 22433 1972-09-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 707500 5652150 Calgary 16 1710
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 004 ***Survey Date:*** 1978-06-03
Last Observed: 1978-06-03 ***First Observed:*** 1950-08-29 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Ft. McLeod, 6 km W of; Oldman River
General Description: Populus angustifolia woods; 3200'
Min Elev. (m): 967 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S78WALUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50WHYUAABCA06 Whyte, J.H. & E.H. Moss UA 14991 1950-08-29 Y ripe fruits
S51BOIACONCA09 Boivin, B. & J.M. Gillet AC 131759 1951-08-18
S51BOIUAABCA03 Boivin, B. & J.M. Gillett UA 73599 1951-08-18 Y Fruits
S52BOIACONCA11 Boivin, B. & J.F. Alex AC 127533 1952-07-02
S52BOIUAABCA08 Boivin, Bernard & J.F. Alex UA 73600 1952-07-02 Y flowers
S52MOSUAABCA17 Moss, E.H. UA 14990 1952-08-23 Y ripe fruits
S78WALUAABCA08 Wallis, C. UA 84572 1978-06-03 Y remains of flowers
S78WALUAABCA09 Wallis, C. UA 84573 1978-06-03 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 320475 5509250 Fort MacLeod 5 1372
Onosmodium molle western false gromwell SRank: S2

Element Code: PDBOR0S030 ***Occurrence Code #:*** 005 ***Survey Date:*** 1960-06-16
Last Observed: 1960-06-16 ***First Observed:*** 1960-06-16 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Claresholm, 9 km W of; Willow Creek, 700 m W of
General Description: freshly disturbed soil
Min Elev. (m): 1029 ***Max Elev. (m):*** 1029
Other Comments: Det. by Boivin as ssp. hispidissimum (Mack) Boivin var. occidentale (Mack) Johnston ***Best Source of Info:*** S60BOIUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S60BOIACONCA01 Boivin, B. AC 131758 1960-06-16
S60BOIUAABCA01 Boivin, Bernard UA 73598 1960-06-16 Y flowers, developing fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I04 12 304875 5543925 Willow Creek 5 1414
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 006 ***Survey Date:*** 1952-08-11
Last Observed: 1952-08-11 ***First Observed:*** 1952-08-11 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Oldman and Belly Rivers, junction of
Min Elev. (m): 876 ***Max Elev. (m):*** 876
Other Comments: Det. as O. molle Mx. spp. hispidissimum (Mack) stat. n. var. occidentale (Mack) ***Best Source of Info:*** S52BOIUAABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIACONCA10 Boivin, B. & J.F. Alex AC 131760 1952-08-11
S52BOIUAABCA09 Boivin, Bernard & J.F. Alex UA 73601 1952-08-11 Y developing fruits, ripe fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 353650 5514850 Belly River 8 1397
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 007 ***Survey Date:*** 1920-06-18
Last Observed: 1920-06-18 ***First Observed:*** 1920-06-18 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Waterton River and Hwy 2, bridge
General Description: gravelly soil
Min Elev. (m): 975 ***Max Elev. (m):*** 975
Other Comments: Det. as O. occidental Mackenzie by McCalla; annot. to O. molle var. occidentale (Mack) ***Best Source of Info:*** S20MCCUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S20MCCUAABCA04 McCalla, W.C. UA 64299 1920-06-18 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 331725 5485600 Waterton River 6 1373
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 008 ***Survey Date:*** 1944-08-29
Last Observed: 1944-08-29 ***First Observed:*** 1944-08-29 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Nanton; Mosquito Creek, bank of
General Description: dry steep bank of creek
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013
Other Comments: Det. as O. occidentale by Moss, annot to O. m. occidentale ***Best Source of Info:*** S44MOSUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44MOSUAABCA03 Moss, E.H. UA 14988 1944-08-29 Y ripe fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I05 12 303350 5581200 Nanton 1 1417
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 009 ***Survey Date:*** 1943-09-01
Last Observed: 1943-09-01 ***First Observed:*** 1943-09-01 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Calgary; Elbow Valley; Glenmore Reservoir, outflow of
Min Elev. (m): 1065 ***Max Elev. (m):*** 1065
Other Comments: Det. as Lithospermum latifolium Mx. by W.C. McCalla; rev. to O. occidentale Mack. by A.J. Breitung, 1947; annot. to O. molle spp. hispidissimum var. occidentale by Boivin, 1959 etc ***Best Source of Info:*** S43TURUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S43TURACONCA04 Turner, G.H. AC none 1943-09-01
S43TURUAABCA08 Turner, G.H. UA 64045 1943-09-01 Y Ripe fruits, some already dispersed
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 704000 5653750 Glenmore Reservoir 4 1855
Onosmodium molle western false gromwell SRank: S2

Element Code: PDBOR0S030 ***Occurrence Code #:*** 010 ***Survey Date:*** 1973-07-22
Last Observed: 1973-07-22 ***First Observed:*** 1973-07-22 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Carseland, 5 km S of; Bow River.
General Description: In open meadow of riverine forest.
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S73COOUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73COOUCABCA01 Cooley, Ellen UC 22432 1976-07-22 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I14 12 325700 5630775 Carseland 1 1426
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 011 ***Survey Date:*** 1975-07-17
Last Observed: 1975-07-17 ***First Observed:*** 1975-07-17 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Stavely, 1.5 km W of.
General Description: Dry, hilly pasture
Min Elev. (m): 1050 ***Max Elev. (m):*** 1050 ***Best Source of Info:*** S75GSCALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75GSCALABCA02 Gschaid, R.G., B. Kesler & P. Berg AL 3313 1975-07-17 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I04 12 309500 5559450 Stavely 6 1415
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 012 ***Survey Date:*** 1997-09-12
Last Observed: 1997-09-12 ***First Observed:*** 1997-09-12 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Highwood River, S side of; High River, 7 km SW of.
General Description: prairie grasland with scattered balsam poplar saplings and Elaeagnus commutata; early successional stage of Populus balsamifera-Elaeagnus commutata community
Min Elev. (m): 1082 ***Max Elev. (m):*** 1082
Other Comments: This species probably favored by occasional soil disturbance in connection with canal maintenance, provided that herbicides are not used on the right-of-way. Specimen collected. 5 clumps seen. ***Best Source of Info:*** PNDGRI01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S97GRIPPABCA08 Griffiths, G.C.D. PP 003514 1997-09-12 +/- 5 clumps seen
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I12 12 289000 5603550 High River LSD 6 30-18-29 W4M 4 3796
Source Code Author Publisher Year Title
U97GRI01ABCA Griffiths, G.C.D. 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-09-12 U97GRI01ABCA G.C.D. Griffiths 5 individuals, all fruiting
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 013 ***Survey Date:*** 1967-08-10
Last Observed: 1967-08-10 ***First Observed:*** 1967-08-10 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Carseland; ~2km SE of; Gravel quarry; just below; Bow River; ~100m N of.
General Description: Several large (1.5m) diameter clumps in native grassland on S facing slope of valley just below edge of gravel quarry.
Min Elev. (m): 945 ***Max Elev. (m):*** 945 ***Aspect:*** S ***Best Source of Info:*** S67ALEACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S67ALEACONCA01 Alex, J.F. & A.B. Harris AC 638046 1967-08-10 several large (1.5m) diameter clumps
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I14 12 328900 5634100 Carseland 5 4192
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 014 ***Survey Date:*** 1930-06-23
Last Observed: 1930-06-23 ***First Observed:*** 1930-06-23 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Fort Macleod, just N of.
General Description: brush
Min Elev. (m): 937 ***Max Elev. (m):*** 937 ***Best Source of Info:*** S30DIXUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S30DIXUAABCA05 Dixon, R.H. UA 14986 1930-06-23 Y flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 326600 5511300 Fort MacLeod 4 1371
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 015 ***Survey Date:*** 2000-09-14
Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 200 ***Precision Code:*** S
Directions: Calgary; Fairview area, E of; Bow River, W of; Cominco Lands
General Description: in low buckbrush (Symphocarpos occidentalis)-shrubby cinquefoil (Potentilla fruticosa)
Min Elev. (m): 1010 ***Max Elev. (m):*** 1020
Other Comments: in NAD27 708252E 5651162N (several hundred plants, ie clumps); in NAD27 708301E 5651663N (10 plants)
Best Source of Info: U00WAL04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 708300 5651650 Calgary 21 6303
Source Code Author Publisher Year Title
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 016 ***Survey Date:*** 2000-09-14
Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Calgary; Fairview area, E of; Bow River, W of; Cominco Lands
General Description: in low buckbrush (Symphocarpos occidentalis)-shrubby cinquefoil (Potentilla fruticosa)
Min Elev. (m): 1010 ***Max Elev. (m):*** 1020
Other Comments: NAD27 708098E 5651277N (2 plants) ***Best Source of Info:*** U00WAL04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 708098 5651277 Calgary 24 6306
Source Code Author Publisher Year Title
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary
Onosmodium molle western false gromwell SRank: S2
++++++++++++++++++++++

Element Code: PDBOR0S030 ***Occurrence Code #:*** 017 ***Survey Date:*** 2000-09-14
Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Calgary; Fairview area, E of; Bow River, W of; Cominco Lands
General Description: in a weedy area (2 plants); in a disturbed borrow pit (1 plant)
Min Elev. (m): 1010 ***Max Elev. (m):*** 1020
Other Comments: NAD27 708313E 5652098N (2 plants); NAD27 708385E 5651963N (1 plant) ***Best Source of Info:*** U00WAL04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 708350 5651900 Calgary 25 6307
Source Code Author Publisher Year Title
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary
Onosmodium molle western false gromwell SRank: S2

Orobanche ludoviciana **Louisiana broom-rape**

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowers in late May to June
Specific Search Strategies (if any): old flower stalk easily detectable year round; search in eroded sands and gravelly sands, mainly near valley rims; occasionally in sand dune slopes

Element Occurrences:

Element Code: PDORO04070 ***Occurrence Code #:*** 001 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1975-07-16 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 7.5 km N of; Lost River Valley, rim of.
General Description: sandy dry prairie and active blowout
Min Elev. (m): 900 ***Max Elev. (m):*** 900 ***Best Source of Info:*** S78SMOALABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78SMOALABCA05 Smoliak, S. & R. Gschaid AL 3534 1978-08-01 Y blooming
S78SMOALABCA06 Smoliak, S. & P. Berg AL 3300 1975-07-16 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 536048 5434735 Lost River 33 4555
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 002 ***Survey Date:*** 1972-07-23
Last Observed: 1972-07-23 ***First Observed:*** 1972-07-12 ***Precision Code:*** G
Directions: Lethbridge, 5 mi S of
General Description: dry gravel pit on a sandy slope
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** S72ALLALABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72ALLALABCA04 Allen, T.D. AL 2778 1972-07-23 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 372000 5494000 Lethbridge Airport 9 1360
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 003 ***Survey Date:*** 1952-08-28
Last Observed: 1952-08-28 ***First Observed:*** 1952-08-09 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Medicine Hat, 4 mi SW of; Seven Persons Creek
General Description: grassy, gravel bank, associated with Chysopsis and Gutierrezia; sandy soil; growing with Artemisia gnaphalodes
Min Elev. (m): 701 ***Max Elev. (m):*** 701 ***Best Source of Info:*** S52MOSUAABCA20
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIUAABCA10 Boivin, B. & J.F. Alex UA 22403 1952-08-09 Y flowers
S52MOSACONCA07 Moss, E.H. AC 35125 1952-08-28
S52MOSUAABCA19 Moss, E.H. UA 15893 1952-08-22 Y flowers
S52MOSUAABCA20 Moss, E.H. UA 15894 1952-08-28 Y flowers, fruits
S52MOSUAABCA23 Moss, E.H. UA 15890 1952-08-24 flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 519675 5536900 Seven Persons Creek 6 162
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 004 ***Survey Date:*** 1979-05-22
Last Observed: 1979-05-22 ***First Observed:*** 1979-05-22 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Lost Creek, 1 km E of
General Description: eroding, E-facing slope, with Koeleria cristata
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044 ***Aspect:*** E ***Best Source of Info:*** S79WALUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA06 Wallis, C. UA 84550 1979-05-22 Y remains of fruits - presumably a last year's plant
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 510448 5427784 Lost Creek 23 34
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 005 ***Survey Date:*** 1984-07-05
Last Observed: 1984-07-05 ***First Observed:*** 1984-07-05 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Whiskey Gap; Sommerfeldt Ranch.
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370 ***Best Source of Info:*** S84SCOACONCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S84SCOACONCA03 Scotter, G.W. AC none 1984-07-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 006 ***Survey Date:*** 1986-07-20
Last Observed: 1986-07-20 ***First Observed:*** 1986-07-20 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Pakowki Lake Sand Dunes; SW of Orion.
General Description: partially buried in sand in somewhat protected interdune area.
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Best Source of Info:*** S86HRAPMABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA12 Hrapko, J.O., Parker, M.E. PM B86.140.14 1986-07-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 007 ***Survey Date:*** 1993-06-14
Last Observed: 1993-06-14 ***First Observed:*** 1993-06-14 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: White Horse Lake, just S of.
General Description: lower slope in dry prairie grassland; in Stipa comata-Bouteloua gracilis community
Min Elev. (m): 635 ***Max Elev. (m):*** 635 ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 536550 5611350 White Horse Lake UTM 536600/5611500 NAD83 39 5067
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 008 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1999-07-21 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bindloss, 6.5 km SW of; CP railway, 2 km N of.
General Description: dry mixedgrass-depression in coulee; Arte can-Stip com/Bout gra/Opon pol; Additional species included: Cory viv, Coll lin, Hete vil, Plan pat, Frig pum, Orth lut, Hete his, associated with rare Astr. lot.
Min Elev. (m): 595 ***Max Elev. (m):*** 595 ***Other Comments:*** 1 specimen collected; UAC
Management Comments: Stake boundaries of areas around plants to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 544750 5634725 Bindloss 03-16-22-03-W4M 22 5323
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1999-07-21 6 vegetative, 6-7 flowering
1999-08-16 U99GOL01ABCA 40 - 50 individuals in a 20 by 25 m area
Orobanche ludoviciana Louisiana broom-rape SRank: S2
++++++++++++++++++++++

Element Code: PDORO04070 ***Occurrence Code #:*** 009 ***Survey Date:*** 1999-08-27
Last Observed: 1999-08-27 ***First Observed:*** 1999-08-27 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Twin Peaks, 14 km SE of; Brush Flats, 5 km E of.
General Description: sandy soils - found among Art fri, Liat pun, Bout gra (domin. spp.), Stip com; surrounding veg. included Hete vil, Rosa woo, Opun pol, Cala lon; xeric
Min Elev. (m): 709 ***Max Elev. (m):*** 709 ***Slope:*** 0.00
Other Comments: collected one senescent stalk
Management Comments: Cattle use-trampling. Pipelines and wellsites. ***Best Source of Info:*** U99BUS02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 530000 5567300 Twin Peak LSD 9-14-15-5-W4M 34 5470
Source Code Author Publisher Year Title
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-08-27 U99BUS02ABCA 2 individuals within 5 cm sq.; veg=9, repr.=8
Orobanche ludoviciana Louisiana broom-rape SRank: S2

Oryzopsis micrantha **little-seed rice grass**

Natural Region: Foothills Fescue Grassland, Dry Mixedgrass
Habitat: Woodland-Sandy
Phenology: heads out in early June
Specific Search Strategies (if any): easily detectable into the fall but the characteristic awns are deciduous so may confuse researchers unfamiliar with the species; the gross morphology of the plant is distinctive even though it is somewhat similar to some *Poa* spp. Under shrubbery, especially choke cherry and saskatoon, and woodland on distinctively sandy slopes

Element Occurrences:

Element Code: PMPOA4J070 ***Occurrence Code #:*** 001 ***Survey Date:*** 1994-06-18
Last Observed: 1994-06-18 ***First Observed:*** 1994-06-18 ***Precision Code:*** S
Directions: White Horse Lake, 8 km E of; The Middle Sand Hills
General Description: stabilized sand dunes; dune slope submesic prairie thicket of Rosa woodsii, Prunus virginiana, Symphoricarpos occidentalis, Agropyron trachycaulum, Chenopodium fremontii;
Min Elev. (m): 695 ***Max Elev. (m):*** 705 ***Best Source of Info:*** S94MACPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94ADAPMABCA04 Adams, Glen PM B94.11.184 1994-06-18 Y
S94MACPMABCA01 Macdonald, I.D., Glen Adams & P. Gregoire PM B94.4.103B 1994-06-18 Y panicles
S94MACPMABCA17 Macdonald, I.D., Adams, Glen, Gregoire, P. PM B94.4.103A 1994-06-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 545400 5612200 Middle Sand Hills 50-39'30",40"N/110-21'25"W 9 223
Oryzopsis micrantha little-seed rice grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-06-20
Last Observed: 1995-06-20 ***First Observed:*** 1995-06-20 ***Precision Code:*** S
Directions: The Middle Sand Hills, SW of
General Description: sandland in deciduous grove of Populus deltoides/Salix lutea - Betula occidentalis; 50 35 42N/110 22 15W; 660m
Min Elev. (m): 660 ***Max Elev. (m):*** 660 ***Best Source of Info:*** S95GREPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95GREPMABCA01 Gregoire, P. PM B95.10.20 1995-06-20 Y panicles
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 544500 5604750 South Saskatchewan River 10 224
Oryzopsis micrantha little-seed rice grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 003 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: McNeill, 7 km SW of
General Description: undulating ground moraine with a sand veneer, on subxeric-submesic sand-sandy loam, in a low thicket of Buckbrush, Common Wild Rose, Green Needle Grass, Northern Wheat Grass [community MH1-A]
Min Elev. (m): 739 ***Max Elev. (m):*** 739
Other Comments: over 50 plants in 3 X 3 m area
Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 564325 5609250 McNeill SW 28-19-1-4 31 4305
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Oryzopsis micrantha little-seed rice grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00

Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: McNeill, 8 km SW of

General Description: rolling dune with subxeric sand, in a low thicket of Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]

Min Elev. (m): 739 ***Max Elev. (m):*** 739

Other Comments: over 20 plants in 2X3 m area [KPMH 6 + 980]; 10 plants in 2X3 m area [KPMH 7 + 485}

Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L09 12 561850 5609250 McNeill SE 30-19-1-4 25 4225

Source Code Author Publisher Year Title

U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project

Oryzopsis micrantha little-seed rice grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00

Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: McNeill, 9 km SW of

General Description: rolling dune on subxeric sand, in a low thicket of Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]

Min Elev. (m): 739 ***Max Elev. (m):*** 739

Other Comments: over 30 plants in 3X4m area

Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L09 12 563550 5607650 McNeill SE 20-19-1-14 26 4226

Source Code Author Publisher Year Title

U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project

Oryzopsis micrantha little-seed rice grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00

Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: McNeill, 9.5 km SW of

General Description: rolling dune with subxeric sand, in a low thicket of ,Common Wild Rose, Wolf Willow, litter, Little-seeded Rice Grass, Low Sedge, Northern Wheat Grass [community MH1-E]

Min Elev. (m): 736 ***Max Elev. (m):*** 736

Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L09 12 563500 5606850 McNeill NE 17-19-1-4 27 4227

Source Code Author Publisher Year Title

U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project

Oryzopsis micrantha little-seed rice grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00

Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: Medicine Hat, 13 km NE of city limits; CFB Suffield, off SE corner of

General Description: undulating, subxeric sand, in low thicket of Common Wild Rose, Buckbrush, Chokecherry, Sand Grass, Needle-and-thread [community SF7-C]

Min Elev. (m): 685 ***Max Elev. (m):*** 693

Other Comments: over 20 plants in 3X3m area

Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L02 12 526800 5561200 Old Channel Lake NE 28-14-5-4 27 4228

Source Code Author Publisher Year Title

U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project

Oryzopsis micrantha little-seed rice grass SRank: S2

+++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Patricia, 19 km NNW of; Dinosaur Provincial Park, 7 km W of northern limits, along Red Deer River valley
General Description: river valley basin plain, on subxeric sandyloam, in tall thicket of Thorny Buffalo Berry, Common WildRose, Buckbrush, Little-seeded Rice Grass, Dragonwort,Western Clematis[community CF3-D]; river valley basin channel depression-see report
Min Elev. (m): 640 ***Max Elev. (m):*** 640
Other Comments: 30 plants in 4X4m area [KPCF 13 + 900]; 25 plants in 3X5m area [KPCF 13 + 930]; 10 plants in 2X2m area [KPCF 14 + 205];
Management Comments: disturbance to the low thicket habitats would affect the vigor of this species ***Best Source of Info:*** U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 450350 5633450 Red Deer River SW 11-22-13-4 11 4229
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 009 ***Survey Date:*** 1994-06-20
Last Observed: 1994-06-20 ***First Observed:*** 1994-06-20 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: CFB Suffield; Medicine Hat, 47 km N of; Ypres Area; Watching Hill, 4 km S of; vicinity of Sherwood Forest.
General Description: rip floodplain levee terrace; mesic young forest of Populus X jackii, Prun vir, Symp occ, Rosa woo, Elym vir, Thal ven, Oryz mic.
Min Elev. (m): 615 ***Max Elev. (m):*** 615 ***Best Source of Info:*** S94MACPMABCA18
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA18 Macdonald, I.D. PM B94.4.252A 1994-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 010 ***Survey Date:*** 1994-06-27
Last Observed: 1994-06-27 ***First Observed:*** 1994-06-27 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: White Horse Lake; ~11.5 km ENE of; S Saskatchewan River; 10.75km N of.
General Description: stabilized sand dune hill slope; submesic thicket of Prun vir, Arte can, Arte camp, Smil stel,Agro das, Ther rho.
Min Elev. (m): 715 ***Max Elev. (m):*** 715 ***Best Source of Info:*** S94MACPMABCA19
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA19 Macdonald, I.D., Trottier, Garry PM B94.4.280A 1994-06-27 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 548350 5615475 CFB Suffield 50-41'25"N/110-18'55"W 32 4335
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 011 ***Survey Date:*** 1994-06-28
Last Observed: 1994-06-28 ***First Observed:*** 1994-06-28 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: CFB Suffield.
General Description: river incise valley ***Slope:*** submesic thicket of Amel aln, Prun vir, Rosa woo, Clem lig, Pari pen, Soli can, Hack amer, Sonc asp, Cirs arv.
Min Elev. (m): 595 ***Max Elev. (m):*** 710 ***Best Source of Info:*** S94MACPMABCA20
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA20 Macdonald, I.D. PM B94.4.357 1994-06-28 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 541050 5597600 CFB Suffield-the middle sandhills 50-31'50"N/110-25'15"W 30 4314
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 012 ***Survey Date:*** 1995-06-20
Last Observed: 1995-06-20 ***First Observed:*** 1995-06-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; 38 km N of Medicine Hat; Fish Creek Area; 3 km ENE of Twin Peaks.
General Description: local in sandy loam of ravine basin; E facing lower slope in mesic tall shrubland community of Prun vir/Pari pen - Chen fre - Hack flo - Elym vir - Urti dio.
Min Elev. (m): 680 ***Max Elev. (m):*** 680
Slope: 36.00 ***Aspect:*** E ***Best Source of Info:*** R97MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA15 Macdonald, I.D., Adams, G. PM B95.9.48 1995-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 196
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 013 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; 22 km NNE of Medicine Hat; Fish Creek Area; Bull Pen.
General Description: river terrace, subxeric open thicket of Arte can, Stip vir, Arte fri, Koel mac, Poa com Agro tra, Arab hol, Symp occ, Liat pun
Min Elev. (m): 630 ***Max Elev. (m):*** 630
Other Comments: also at 526500/5567000 ***Best Source of Info:*** R97MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA21 Macdonald, I.D. PM B94.4.399 1994-06-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 014 ***Survey Date:*** 1995-06-26
Last Observed: 1995-06-26 ***First Observed:*** 1995-06-26 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: White Horse Lake; ~6.5 km ESE of; S Saskatchewan River; ~5.5 km N of.
General Description: sand of seasonally moist interdunal depression on rolling dune field in submesic tall shrubland of Symp occ - Rosa woo - Sali lut/Glycrrhiza lepidota - Agro das-pin -Care ste.
Min Elev. (m): 695 ***Max Elev. (m):*** 695 ***Best Source of Info:*** R97MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA16 Macdonald, I.D. PM B95.9.9 1995-06-26 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 542500 5609000 CFB Suffield 50-37'55"N/110-23'52"W 34 4328
Source Code Author Publisher Year Title
R97MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1997 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 015 ***Survey Date:*** 1995-07-01
Last Observed: 1995-07-01 ***First Observed:*** 1995-07-01 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: White Horse Lake; ~10.3 km SE of, S. Saskatchewan River, 200 m N of.
General Description: sand of lower slope of ravine with mesic deciduous grove of Popu tre/Sali beb/Symp occ - Ribe oxy/Equi arv - Agro tra
Min Elev. (m): 660 ***Max Elev. (m):*** 660 ***Aspect:*** E ***Best Source of Info:*** S95MACPMABCA17
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA17 Macdonald, I.D. PM B95.9.17 1995-07-01 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 545625 5605200 CFB Suffield 50 35 55 N, 110 21 25 W 35 4355
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 016 ***Survey Date:*** 1977-06-14
Last Observed: 1977-06-14 ***First Observed:*** 1977-06-14 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Cavendish, 12.5 km NNE of; Red Deer River, E side of.
General Description: cottonwood/grass habitat
Min Elev. (m): 602 ***Max Elev. (m):*** 602 ***Best Source of Info:*** S77BRAUAABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA09 Bradley, C., Wallis, C. UA 75352 1977-06-14 Y spikelets; plant still green
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 540800 5641825 Red Deer River 6-23-3 W4M 18 4507
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 017 ***Survey Date:*** 1976-07-01
Last Observed: 1976-07-01 ***First Observed:*** 1976-07-01 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Pinhorn Provincial Grazing Reserve; Milk River N.A., very NW end of, 4 km WSW of.
General Description: on sandy soil; growing at edge of hybrid Populus x acuminata poplar woods
Min Elev. (m): 915 ***Max Elev. (m):*** 915 ***Best Source of Info:*** S76WALUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76WALUAABCA02 Wallis, C. UA 56337 1976-07-01 Y dehisced spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 515223 5437784 Milk River 6-2-6 W4M 21 4508
Oryzopsis micrantha little-seed rice grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA4J070 ***Occurrence Code #:*** 018 ***Survey Date:*** 1987-09-23
Last Observed: 1987-09-23 ***First Observed:*** 1987-09-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat golf course, 1.75 km N of; S. Sask. River, on W bank of.
General Description: under saskatoon shrubbery on fault blocks halfway down river breaks
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Size of Occurrence:*** ***Best Source of Info:*** S87HUDNMONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87HUDNMONCA02 Hudson, J.H. NM 528802 1987-09-23 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 524675 5546350 South Saskatchewan River 11-8-13-5 W4M 42 5497
Oryzopsis micrantha little-seed rice grass SRank: S2

Osmorhiza longistylis smooth sweet cicely

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Woodland-Sandy
Phenology: flowers in early to mid-June
Specific Search Strategies (if any): fruiting plants are easily identifiable into October; primarily in sandy coulee woodlands with springs, especially where ungrazed and frequently under Manitoba maple

Element Occurrences:

Element Code: PDAPI1K060 ***Occurrence Code #:*** 001 ***Survey Date:*** 1968-08-15
Last Observed: 1968-08-15 ***First Observed:*** 1944-07-26 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Edmonton; Groat Ravine, bottom of; near its mouth above bridge.
General Description: Forest ravine. Edge of thicket, occasional
Min Elev. (m): 640 ***Max Elev. (m):*** 671
Other Comments: Lat/long does not correspond with other information for Savale, 1968 specimen. ***Best Source of Info:*** S45TURUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44TURACONCA02 Turner, G.H. AC 118974 1944-07-26
S44TURACONCA03 Turner, G.H. AC 118971 1944-08-02
S44TURACONCA05 Turner, G.H. AC 346643 1944-07-03 rare on prairies
S44TURUAABCA08 Turner, G.H. UA 62375 1944-08-02 fruits
S44TURUCABCA05 Turner, G.H. UC 19745 1944-08-02 Y fruiting
S44TURULABCA02 Turner, G.H. UL none 1944-08-02 fruits
S45TURACONCA06 Turner, G.H. AC 118973 1945-06-28
S45TURUAABCA01 Turner, G.H. UA 62377 1945-06-28 flowers, developing fruits
S45TURUAABCA07 Turner, G.H. UA 62378 1945-06-28 Y flowers
S68SAVPMABCA07 Savale, W.F. PM B68.7.10 1968-08-15 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 331700 5935550 Edmonton 13 3356
Date Source Abstract Code Observer Occurrence Data
flowers, developing fruits (1945), fruits (1944)
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 002 ***Survey Date:*** 1946-07-12
Last Observed: 1946-07-12 ***First Observed:*** 1946-07-12 ***Precision Code:*** S
Directions: Macdonald Hotel, below.
General Description: mixed woods
Min Elev. (m): 648 ***Max Elev. (m):*** 648 ***Best Source of Info:*** S46MOSUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S46MOSUAABCA01 Moss, E.H. UA 13461 1946-07-12 fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 335200 5934950 Edmonton 17 3334
Date Source Abstract Code Observer Occurrence Data
fruits
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 003 ***Survey Date:*** 1977-06-16
Last Observed: 1977-06-16 ***First Observed:*** 1977-06-16 ***Precision Code:*** M
Directions: Bindloss bridge, 4 mi NW of.
General Description: Manitoba Maple woodland, along coulee.
Min Elev. (m): 610 ***Max Elev. (m):*** 610 ***Best Source of Info:*** S77BRAUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BRAUAABCA01 Bradley, C. & C. Wallis UA 75556 1977-06-16 flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Date Source Abstract Code Observer Occurrence Data
flowers, developing fruits
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 004 ***Survey Date:*** 1979-08-13
Last Observed: 1979-08-13 ***First Observed:*** 1963-08-20 ***Precision Code:*** S
Directions: *Cypress Hills, W side of; Reesor Lake, 1.5 km N of.*
General Description: Spring at base of slope; mesic; willow; water birch; poplar, lush herbs. Fine textured soils
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Best Source of Info:*** S79BRAUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S63NEWACONCA01 Newsome, R.D. AC 118970 1963-08-20 Stand No. 159
S79BRAUAABCA02 Bradley, C. UA 84167 1979-08-13 Portion of plant in fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 563772 5504282 Reesor Lake 13 109
Date Source Abstract Code Observer Occurrence Data
assoc. spp: Actaea rubro, Osmorhiza depau? , Geanium richardsonii. Portion of plant in fruit.
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 005 ***Survey Date:*** 1995-06-20
Last Observed: 1995-06-20 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River ravine; valley slope
General Description: mesic site, tall thicket of Prunus virginiana.Sandy loam of ravine basin lower slope in tall shrubland community of Prunus virginiana/Parietaria pensylvanica-Chenopodium fremontii-Hackelia flor-Elymus vir-Urtica doi; rare
Min Elev. (m): 680 ***Max Elev. (m):*** 701
Slope: 36.00 ***Aspect:*** E ***Best Source of Info:*** U96MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA10 Macdonald, I.D., Adams, G.? PM B95.9.46 1995-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 195
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA; very sparse in the ground cover
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 006 ***Survey Date:*** 1955-09-08
Last Observed: 1955-09-08 ***First Observed:*** 1955-09-08 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Medicine Hat; ~16km NE of; Old Channel Lake; ~2.5km SE of.
General Description: With aspen, alder and Manitoba maple stream valley.
Min Elev. (m): 693 ***Max Elev. (m):*** 693 ***Best Source of Info:*** S55MOSACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S55MOSACONCA01 Moss, E.H. AC 118969 1955-09-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 526000 5564000 Old Channel Lake 50 14/110 38 12 3821
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 007 ***Survey Date:*** 1974-06-00
Last Observed: 1974-06-00 ***First Observed:*** 1974-06-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Provincial Museum of AB; SW corner of parking lot; Mouth of Groat Ravine; ~250m W of.
General Description: under trees in deep shade
Min Elev. (m): 640 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S74TAYPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74TAYPMABCA01 Taylor, D.A. PM B74.9.1 1974-06-00 Y
S78ALLPMABCA18 Allen, A. PM B78.10.2 1978-05-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 331400 5935175 Edmonton Provincial Museum 53-30N/113-20W; 53-33N/113-28W 1 4273
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 008 ***Survey Date:*** 1981-06-24
Last Observed: 1981-06-24 ***First Observed:*** 1981-06-24 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Stettler, NW of; Buffalo Lake, E shore of; Boss Hill
Min Elev. (m): 805 ***Max Elev. (m):*** 805 ***Best Source of Info:*** S81HRAPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S81HRAPMABCA03 Hrapko, J.O., Kerik, J.C. PM B81.15.5 1981-06-24 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A10 12 379600 5818150 Buffalo Lake Lat/Long: 52 30'/ 112 46' 1 2320
Osmorhiza longistylis smooth sweet cicely SRank: S2

Element Code: PDAPI1K060 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-10-21
Last Observed: 1996-10-21 ***First Observed:*** 1996-10-21 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Winterburn School; 0.45 mi W; Twp 52 Rge 26 W4: LSD7; around old homestead building, circa 1902s
General Description: submesic; disturbed area
Slope: 2.00 ***Aspect:*** 0
Management Comments: inactive homestead ***Best Source of Info:*** UNDSTR02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H12 12 321110 5934710 Winterburn W1/3 of N1/2 of SE36 17 4619
Source Code Author Publisher Year Title
U96STR02ABCA Strong, W.L. 1996 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1996-10-21 UNDSTR02ABCA Strong, Wayne - keyed at site Moss(1983) about 20 plants, all fruiting
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 010 ***Survey Date:*** 1999-06-18
Last Observed: 1999-06-18 ***First Observed:*** 1999-06-18 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Edmonton; Queen Elizabeth Park.
General Description: moist shaded area in Balsam Poplar-dominated forest; mesic
Min Elev. (m): 625 ***Max Elev. (m):*** 625
Slope: 10.00 ***Aspect:*** N ***Best Source of Info:*** U99GRI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 334400 5933450 Edmonton - Queen Elizabeth Park 53 31 34/113 29 55 36 5164
Source Code Author Publisher Year Title
U99GRI01ABCA Griffiths, G.C.D. 1999 Rare Native Plant Survey
Date Source Abstract Code Observer Occurrence Data
1999-06-18 U99GRI01ABCA G.C.D. Griffiths about 50 individuals flowering
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 011 ***Survey Date:*** 1999-07-16
Last Observed: 1999-07-16 ***First Observed:*** 1999-06-26 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Ressor Lake, N side of.
General Description: in Crat dou(?)/Hera lan-Urti gra-Viol can shrub (5 m tall) thicket along shallow dranage at mid-slope and deciduous fores of Popu trem, Heur lan, Hack sp.; mesic well-drained to submesic
Min Elev. (m): 1210 ***Max Elev. (m):*** 1310
Slope: 19.00 ***Aspect:*** S ***Size of Occurrence:*** 2.00
Other Comments: more detailed locations in digital file of Cypress Hills. Specimen collected, collector number 009 (R. Ernst)
Management Comments: livestock grazing and recreation; presence of non-native species - Arct min; difficult for livestock to access ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 564725 5501750 Ressor Lake 67 5516
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-06-26 U99BRA01ABCA Reg Ernst more than 100 plants scattered along the eastern ridge (in understory) of aspen woodland (5000 m2); V6 vegetative; R7 reproductive
1999-07-16 U99BRA01ABCA Cherly Bradley & Wynne Miles 12U 564 728/5501 750 - 15-25 plants in a plot 400 m2 (CB9001), V6 veget, R11 reprod; 12U 565 450/5501 360 - ca 75 plants in 50 m transect ca 10 m wide (500 m2), may be up to 2500 plants in whole thicket (15,000m2) - Crat dou(?)/Urti gra-Viol can shrub (5 m tall) on lower slope, V6 veget, R10 reprod, slope 49%
Osmorhiza longistylis smooth sweet cicely SRank: S2
++++++++++++++++++++++

Element Code: PDAPI1K060 ***Occurrence Code #:*** 012 ***Survey Date:*** 1999-07-16
Last Observed: 1999-07-16 ***First Observed:*** 1999-07-16 ***Actual Mapping Precision (m):*** 20 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Ressor Lake, 3 km E of; Battle Creek, slopes N of.
General Description: Crat dou/ Urt gra-Hier lan-Viol can shrub (5-6 m tall) thicket on S-facing slope above creek
Min Elev. (m): 1225 ***Max Elev. (m):*** 1225
Slope: 12.00 ***Aspect:*** S ***Size of Occurrence:*** 0.04
Other Comments: PLOT CB9002
Management Comments: livestock graizing and trampling from recreattional use ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 568500 5501350 Battle Creek 70 5519
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-07-16 U99BRA01ABCA Chery Bradley & Wynne Miles 3 individual in 400m2 plot; V6 vegetative; R10 reproductive
Osmorhiza longistylis smooth sweet cicely SRank: S2

Oxytropis lagopus var conjugans hare-footed locoweed

Natural Region: Foothills Fescue Grassland
Habitat: Grassland-Unglaciated
Phenology: flowers late May to early June
Specific Search Strategies (if any): exposed pre-glacial gravels on unglaciated summit of Milk River Ridge; occasional on gravels elsewhere

Element Occurrences:

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 001 ***Survey Date:*** 1967-06-06
Last Observed: 1967-06-06 ***First Observed:*** 1966-06-05 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Cardston, 2 km SW of; Reservoirs.
General Description: banks of abandoned gravel pit
Min Elev. (m): 1150 ***Max Elev. (m):*** 1150 ***Aspect:*** S ***Best Source of Info:*** S67SHAULABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66SHAACONCA01 Shaw, K. AC 591185 1966-06-05 collected on the exact site of the first collection of this species for Canada
S66SHAACONCA02 Shaw, K. AC 666478 1966-06-05 collected on the exact site of the first collection of this species for Canada
S67SHAACONCA01 Shaw, K. AC 619699 1967-06-06
S67SHAULABCA01 Shaw, Keith UL none 1967-06-06 50%
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 330550 5449650 Cardston 28 967
Source Code Author Publisher Year Title
A66SHA01ABCA Shaw, Keith Blue Jay 1966 A New Species of Oxytropis for Alberta
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 002 ***Survey Date:*** 1992-05-31
Last Observed: 1992-05-31 ***First Observed:*** 1986-05-24 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Whiskey Gap; Sommerfeldt Ranch.
General Description: rough fescue grassland; gravelly plateau rims on the ridge
Min Elev. (m): 1402 ***Max Elev. (m):*** 1402 ***Best Source of Info:*** S92SOMCFABCA08 ***Source Code Collector Herbarium Accession # Date ID OK? Observation Detail***
S86SOMCFABCA03 Sommerfeldt, B. CF 860196 1986-05-24 Flowers
S92SOMCFABCA08 Sommerfeldt, B. CF 860196 1992-05-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352300 5434000 Whiskey Gap 3 943
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 003 ***Survey Date:*** 1985-05-23
Last Observed: 1985-05-23 ***First Observed:*** 1983-06-22 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: North Milk River Area; Ross Lake, near.
General Description: fescue grassland; dry hill top
Min Elev. (m): 1348 ***Max Elev. (m):*** 1348 ***Best Source of Info:*** S85ALLPPABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83ALLPPABCA02 Allen, L., P. McIsaac & M. Bailey PP 49 1983-06-22
S83ALLPPABCA03 Allen, L., P. McIsaac & M. Bailey PP 50 1983-06-22
S85ALLPPABCA03 Allen, L. & S. Myers PP 48 1985-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 360325 5442700 Ross Lake 13 931
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-05-19
Last Observed: 1996-05-19 ***First Observed:*** 1996-05-19 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: North Milk River; an unglaciated ridge, found along
General Description: little or no top soil with a shallow to gravel subsoil; common
Min Elev. (m): 1387 ***Max Elev. (m):*** 1387 ***Best Source of Info:*** UNDBOY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 357800 5437850 North Milk River LSD 8 7 925
Source Code Author Publisher Year Title
UNDBOY01ABCA Boyle, Jon 1996 Letter of Nov. 18, 1996 to J. Gould from Rangeland Conservation Service
Date Source Abstract Code Observer Occurrence Data
more than 50 plants
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-05-19
Last Observed: 1996-05-19 ***First Observed:*** 1996-05-19 ***Precision Code:*** S
Directions: North Milk River; upper terrace, found along an
General Description: little or no top soil with a shallow to gravel subsoil
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280 ***Best Source of Info:*** UNDBOY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 357400 5434750 North Milk River LSD 10 8 926
Source Code Author Publisher Year Title
UNDBOY01ABCA Boyle, Jon 1996 Letter of Nov. 18, 1996 to J. Gould from Rangeland Conservation Service
Date Source Abstract Code Observer Occurrence Data
More than 50 plants
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 006 ***Survey Date:*** 1986-05-29
Last Observed: 1986-05-29 ***First Observed:*** 1986-05-28 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Ross Lake, 6.5 km SE of; North Milk River, N side of.
General Description: gravelly dry grassland; rare
Min Elev. (m): 1250 ***Max Elev. (m):*** 1250 ***Best Source of Info:*** PNDWAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 363700 5439750 North Milk River 14 932
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 007 ***Survey Date:*** 1998-05-00
Last Observed: 1998-05-00 ***First Observed:*** 1986-05-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Ross Lake, 6 km S of; North Milk River, ridge N of.
General Description: well drained, sparsely vegetated, slightly sloped ridge tops; Festuca spp., Koeleria macrantha, Carex spp., Phlox hoodii, Oxytropis viscida, Comandra umbellata
Min Elev. (m): 1370 ***Max Elev. (m):*** 1375 ***Aspect:*** SE
Other Comments: Gravel operations have already removed a significant amount of habitat; grazing does not seem to be sufficiently heavy to eliminate species - C. Wallis. ***Best Source of Info:*** S93SMIUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93SMIUCABCA01 Smith, Bonnie UC none 1993-05-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 359000 5439000 North Milk River S 6-2-22-W4; 49 05/112 55 - Wallis; SE 6-2-22-W4; 49 05/112 56- Smith 15 933
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey
U99ERN01ABCA Ernst, Reg 1999 E-mail massage Reg Ernst to Joyce Gould
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
1986-05-28 U95SMI02ABCA Cliff Wallis moist plants either in flower or with well-developed pods; most in pod stage; 500 to 1000 plants
1998-05-06 U98ERN01ABCA Reg Ernst about 3200 plants; 2000 adults, 600 juveniles, 100 others; 600 flowers
1999-06-17 U99ERN02ABCA Reg Ernst heavy flower predation; only plants that may produce pods are the few located in the Fescue edge at main population
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 008 ***Survey Date:*** 1993-05-23
Last Observed: 1993-05-23 ***First Observed:*** 1986-05-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Del Bonita, 5.5 km Nw of
General Description: east facing gravelly rim of unglaciated plateau; scattered plants
Min Elev. (m): 1287 ***Max Elev. (m):*** 1287 ***Aspect:*** E ***Best Source of Info:*** S93SMIUCABCA02
Specimen Source Code Collector Herbarium Accession #Date ID OK? Observation Detail
S93SMIUCABCA02 Smith, Bonnie UC none 1993-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 365950 5436400 Del Bonita NE 26-1-22-W4; 49 04/112 50 16 934
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
+++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 009 ***Survey Date:*** 1993-05-23
Last Observed: 1993-05-23 ***First Observed:*** 1993-05-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Shanks influence in Shanks Lake, 500 m SE of.
General Description: upper slopes of the plateau rim as well as on the gravelly plain on top of the plateau (to 10 m away from edge; habitat semi-barren with abundant Phlox alyssifolia & Artemisia campestris
Min Elev. (m): 1295 ***Max Elev. (m):*** 1295 ***Best Source of Info:*** S93SMIUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93SMIUCABCA03 Smith, Bonnie UC none 1993-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 373700 5435000 Shanks Lake NE 22 & SE 27-1-21-W4; 49 03.5/112 44 17 935
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
+++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 010 ***Survey Date:*** 1993-05-23
Last Observed: 1993-05-23 ***First Observed:*** 1993-05-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Del Bonita, 7 km E of
General Description: low hills; species makes carpets the upper slopes of lower hil
Min Elev. (m): 1257 ***Max Elev. (m):*** 1257 ***Best Source of Info:*** S93SMIUCABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S93SMIUCABCA04 Smith, Bonnie UC none 1993-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 376750 5431650 Shanks Lake NW 12-1-21-W4; 49 01.5/112 41 18 936
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Date Source Abstract Code Observer Occurrence Data
1993-05-22 U95SMI02ABCA Bonnie Smith this set of hills is estimated to contain low thousands of plants if fully surveyed
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1
+++++++++++++++++++++++

Element Code: PDFAB2X0A2 ***Occurrence Code #:*** 011 ***Survey Date:*** 1993-05-23
Last Observed: 1993-05-23 ***First Observed:*** 1976-06-01 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Shanks Lake, W end of, 2 km NNW of.
General Description: west and north-west facing gravelly rim of unglaciated plateau; common
Min Elev. (m): 1287 ***Max Elev. (m):*** 1287 ***Aspect:*** WNW ***Best Source of Info:*** S76FODUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76FODUCABCA01 Foder, Fred UC 17345 1976-06-01 Y blooming and fruiting
S93SMIUCABCA05 Smith, Bonnie UC none 1993-05-23
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 370150 5437500 Shanks Lake SE 32-1-21-W4; 49 04.5/112 46 19 937
Source Code Author Publisher Year Title
U95SMI02ABCA Smith, Bonnie Committee on the Status of Endangered Wildlife in Canada 1995 Status Report on the Hare-footed Locoweed Oxytropis Lagopus Nutt. in Canada
Oxytropis lagopus var conjugans hare-footed locoweed SRank: S1

Parietaria pensylvanica American pellitory

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Woodland-Sandy
Phenology: flowers in June
Specific Search Strategies (if any): occurs in sandy slope shrubbery (especially chokecherry) and coulee woodlands; distinctive foliage and fruits detectable into October

Element Occurrences:

Element Code: PDURT06060 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-06-15
Last Observed: 1989-06-15 ***First Observed:*** 1989-06-15 ***Precision Code:*** S
Directions: Milk River Natural Area
General Description: Dense chokecherry shrubbery on N-facing coulee slope, near head of coulee
Min Elev. (m): 950 ***Max Elev. (m):*** 950 ***Aspect:*** N ***Best Source of Info:*** S89WALPPABCA14
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA14 Wallis, C. PP 654 1989-06-15 About 50 plants; more common in the adjacent coulees
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 524923 5427484 Milk River Natural Area LSD 2 15 26
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-09-01
Last Observed: 1995-09-01 ***First Observed:*** 1995-09-01 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 14 km WSW of; Cypress Hills plateau, highlands W of.
General Description: Mesic sandy loam of slump basin north-facing upper slope with mixed forest of Picea glauca - Populus tremuloides / Rubus idaeus - Prunus virginiana / Parietaria pensylvanica - V...
Min Elev. (m): 1219 ***Max Elev. (m):*** 1219 ***Aspect:*** N ***Size of Occurrence:*** ***Best Source of Info:*** S95MACUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACSKSKCA01 Macdonald, I.D. SK none 1995-09-01
S95MACUAABCA03 Macdonald, Ian D. UA none 1995-09-01 Y [flowers]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 540074 5494581 Eagle Butte Site 66; 49 36/110 26; LSD 11 25 121
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-09-03
Last Observed: 1995-09-03 ***First Observed:*** 1995-09-03 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 12 km WSW of; Cypress Hills plateau, highlands NW of; head of Medicine Lodge Creek Coulee, W slope of.
General Description: Mesic clay loam of east facing coulee slope with coniferous forest of Picea glauca / Prunus virginiana / Rubus idaeus -Symphoricarpos occidentalis - Spiraea betulifolia /Cinna ...
Min Elev. (m): 1212 ***Max Elev. (m):*** 1212 ***Aspect:*** E ***Size of Occurrence:*** ***Best Source of Info:*** S95MACPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA02 Macdonald, I.D. PM B96.1.13 1995-09-03 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 540374 5496581 Eagle Butte Site 75; 49 37/110 26: LSD 15 26 122
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 004 ***Survey Date:*** 1991-07-01
Last Observed: 1991-07-01 ***First Observed:*** 1958-06-27 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Writing-on-Stone PP
General Description: edge of pathway through stand of Populus deltoides & Shepherdia argentea. Flat of Milk River
Min Elev. (m): 915 ***Max Elev. (m):*** 915 ***Best Source of Info:*** S91JOHCFABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S58BOIACONCA05 Boivin, B & J.-M. Perron AC none 1958-06-27 Plante legerement accrochante (very slight growth?)
S58BOIUAABCA08 Boivin, B., Perron, J.-M. UA 7342 1958-06-27 Y fruits
S91JOHCFABCA11 Johnson, J.D. CF 930117 1991-07-01 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 454074 5436383 Writing-on-Stone Provincial Park 49-05N/111-37W 7 55
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 005 ***Survey Date:*** 1992-10-01
Last Observed: 1992-10-01 ***First Observed:*** 1992-07-23 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Police Creek, 4.5 km E of; USA border, 250 m N of
General Description: dry mixed grass ecoregion: dry gully thicket of Crataegus rotundifolia-Rosa woodsii-Ribes oxyaccanthoides and Crataegus rotundifolia-Amelanchier alnifolia-Populus tremuloides
Min Elev. (m): 1143 ***Max Elev. (m):*** 1212 ***Best Source of Info:*** S92MACUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92MACPMABCA05 Macdonald, Ian D. PM B93.5.54 1992-07-23 Y fruits
S92MACUAABCA02 Macdonald, Ian D. UA none 1992-10-01 Y flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 456074 5427284 Police Creek 3 51
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Medicine Hat Airport; ~33.75km SW of; S.Saskatchewan River; ~1km S of.
General Description: Many plants. South side of S Saskatchewan River beneath rose/hawthorn.
Min Elev. (m): 777 ***Max Elev. (m):*** 777 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500562 5539450 S. Saskatchewan River LS#46;km:302.1;LLD:NW 23 12-8-4 20 4012
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Seven Persons; ~6.5km NE of; Fitzgerald, ~2.5km NW of; Seven Persons Creek; ~250m E of.
General Description: Many plants. Seven Persons Creek beneath thorny buffaloberry. Seed collected and re-seeded.
Min Elev. (m): 739 ***Max Elev. (m):*** 739 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 512156 5528768 Seven Persons Creek LS#48;km:318.7;LLD NE 13 11-7-4 15 4013
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Seven Persons; ~33.5km SE of; Bullshead Creek; ~3.75km W of.
General Description: Beneath rose/hawthorn/buckbrush. Not re-located in time for seed collection. Probably occurs along creek either side of RoW.
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 520700 5512050 Bullshead Creek LS#51;km:338.3;LLD:SE 7-26 9-6-4 16 4014
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Seven Persons; ~34.75km SE of; Bullshead Creek; ~6.75 km W of.
General Description: Beneath rose/hawthorn/buckbrush. RoW narrowed. Population avoided.
Min Elev. (m): 937 ***Max Elev. (m):*** 937 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 521436 5511290 Bullshead Creek LS#51;km:339.2;LLD:NW 13-24 9-6-4 17 4015
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 010 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Seven Persons; ~38.5km SE of; Bullshead Creek; ~1.25km E of.
General Description: beneath rose/hawthorn/buckbrush. RoW narrowed. Population avoided
Min Elev. (m): 945 ***Max Elev. (m):*** 945 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 527174 5510866 Bullshead Creek LS#51;km:339.5;NW 13-24 9-6-4 18 4016
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 011 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Rush Lake; ~7km NW of; road ~1km W of.
General Description: Beneath rose/hawthorn/buckbrush. Off RoW, population avoided.
Min Elev. (m): 937 ***Max Elev. (m):*** 937 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 521944 5510369 Rush Lake LS#51;km:340.6/340;SW 24 9-6-4/NW 24 9-6- 4 16 4017
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 012 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Rush Lake; ~4.5km SE of; road; 100m W of.
General Description: Beneath rose/hawthorn/buckbrush. Shrubs/seed bank transplant.
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 522851 5508066 Rush Lake LS# 51;km:342.3;LLD:SE 13 9-6-4 17 4018
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 013 ***Survey Date:*** 1952-06-24
Last Observed: 1952-06-24 ***First Observed:*** 1952-06-24 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Medicine Hat; ~6.5kmSW of; Hwy 3; ~3.5km E of.
General Description: Ravin lateral. Parmi les Urtica
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Best Source of Info:*** S52BOIACONCA16
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIACONCA16 Boivin, B. & J.F. Alex AC none 1952-06-24 parmi les Urtica (among Urtica)
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 519675 5536900 Seven Persons Creek 6 162
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 014 ***Survey Date:*** 1994-06-28
Last Observed: 1994-06-28 ***First Observed:*** 1994-06-28 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield: Medicine Hat, 53km NNE of; Ypres Area; Dishpan Lake, 10km SE of.
General Description: river incise valley basin: mesic thicket of Prun vir, Ribe oxy, Rhus rad, Brom ine, Hack ame, Urti dio
Min Elev. (m): 595 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA34 Macdonald, I.D. PM B94.4.339A 1994-06-28 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 541050 5597600 CFB Suffield-the middle sandhills 50-31'50"N/110-25'15"W 30 4314
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 015 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Medicine Hat, 22 km NNE of; Fish Creek Area; Bull Pen.
General Description: river levee: submesic grove of P del, Sali exi, Poa pal, Ribe oxy, Chen fre, Hack ame
Min Elev. (m): 630 ***Max Elev. (m):*** 630 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA35 Macdonald, I.D. PM B94.4.412 1994-06-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 016 ***Survey Date:*** 1994-07-08
Last Observed: 1994-07-08 ***First Observed:*** 1994-07-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Medicine Hat, 33 km N of; Fish Creek Area; Van Will Corral, 5 km E of.
General Description: river incised valley basin, submesic thickets of Sali amy, Ribe oxy, Symp occ, Care pra.
Min Elev. (m): 620 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA36 Macdonald, I.D. PM B94.4.568 1994-07-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 017 ***Survey Date:*** 1994-08-29
Last Observed: 1994-08-29 ***First Observed:*** 1994-08-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Twin Peaks; ~3 km ESE of S Saskatchewan River; ~1.2 km W of.
General Description: river incised valley basin: growing profusely among dried tumbleweed jumble.
Min Elev. (m): 645 ***Max Elev. (m):*** 690 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA37 Macdonald, I.D. PM B94.4.604A 1994-08-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527500 5579350 CFB Suffield 50-22'05"N/110-36'50"W 33 4342
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 018 ***Survey Date:*** 1995-06-20
Last Observed: 1995-06-20 ***First Observed:*** 1995-06-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; Medicine Hat, 38 km N of; Fish Creek Area; Twin Peaks, 3 km ENE of
General Description: sandy loam of ravine, lower slope, in mesic tall shrubland community of Prun vir/Parie pen-Cheno fre-Hack flo-Elym vir-Urti dio.
Min Elev. (m): 680 ***Max Elev. (m):*** 680
Slope: 36.00 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA18 Macdonald, I.D., Adams, Glenn PM B95.9.44 1995-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527960 5581580 Twin Peaks 50 23 07N, 110 36 25 W 11 196
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 019 ***Survey Date:*** 1977-06-17
Last Observed: 1977-06-17 ***First Observed:*** 1977-06-17 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Lethbridge University, below; Oldman River Valley; Weir.
Min Elev. (m): 820 ***Max Elev. (m):*** 820 ***Best Source of Info:*** S77KUIUAABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77KUIUAABCA07 Kuijt, J. UA 85543 1977-06-17 Y small plants but in fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 366000 5505000 Lethbridge - University Area 29 4509
Parietaria pensylvanica American pellitory SRank: S2
++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 020 ***Survey Date:*** 1985-06-27
Last Observed: 1985-06-27 ***First Observed:*** 1985-06-27 ***Actual Mapping Precision (m):*** 900 ***Precision Code:*** M
Directions: Onefour, 13.5 km NE of; Cressday, 9 km SW of; Sage Creek.
General Description: in chokecherry shrubs on E-facing dry woody slope
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Aspect:*** E ***Best Source of Info:*** S85WERUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WERUAABCA01 Wershler, C. UA 098411 1985-06-27 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 021 ***Survey Date:*** 1998-07-03
Last Observed: 1998-07-03 ***First Observed:*** 1998-07-03 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Old Channel Lake, 2 km ENE of; South Saskatchewan River, 0.7 km E of.
General Description: shrubs in sandhills; in Prunus virginiana shrub bed; heavely used by cattle and deer; weedy understory with Axyris amaranthoides and Bromus tectorum; overstory is broken by cattle; xeric; not enough shade for pellitory?
Min Elev. (m): 630 ***Max Elev. (m):*** 685 ***Aspect:*** N
Management Comments: Part of population will be eliminated by pipeline Row. ***Best Source of Info:*** U98BUS01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 528850 5564300 South Saskatchewan River LSD12-02-15-5- W4M 39 5058
Source Code Author Publisher Year Title
U98BUS01ABCA Bush, C. Dana 1998 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1998-07-03 U98BUS01ABCA Dana Bush dozens of plants
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 022 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Old Channel Lake; coulee springs; Sect. 29-Tp14-R5-W4M
General Description: coulees along valley of S. Sask. River; moist woodland at edge of slightly saline springs
Min Elev. (m): 640 ***Max Elev. (m):***
Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells
Management Comments: heavy cattle grazing at one spring; petroleum dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525600 5561450 Old Channel Lake Sect. 29-Tp14-R5-W5M; mapped as polygon 44 6015
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C. Wallis See unpubl report in-house
Parietaria pensylvanica American pellitory SRank: S2
+++++++++++++++++++++++

Element Code: PDURT06060 ***Occurrence Code #:*** 023 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bindloss, W of; Dune Point Spring; N side of Red Deer River; Tp23-R3--4-W4M
General Description: coulees with springs along river ; Acer negundo woodlands
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Management Comments: current mgmt practice consistent with conservn, i.e. , no grazing, no withdrawal of groundwater ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 543000 5643000 Bindloss 2 249
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis abundant in Acer neg woods
Parietaria pensylvanica American pellitory SRank: S2

Picradeniopsis (Bahia) oppositifolia picradeniopsis

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Badlands
Phenology: flowers in late June, early July
Specific Search Strategies (if any): wide area searches on gentle badland slopes, especially near rims; very localized populations with few individuals; distinctive plant and easily detectable when in flower; may be overlooked when not in flower and confused with more common species

Element Occurrences:

Element Code: PDAST76010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1969-07-04
Last Observed: 1969-07-04 ***First Observed:*** 1969-07-04 ***Precision Code:*** M
Directions: West Lethbridge, new University site
General Description: in cultivated field
Min Elev. (m): 910 ***Max Elev. (m):*** 910
Other Comments: also 2nd specimen from same date, collected by J.J. Sexsmith at same location in recently abandoned field; Access # 5023 ***Best Source of Info:*** S69SEXALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69SEXALABCA01 Sexsmith, J.J. AL 2458 1969-07-04 Y blooming
S69SEXALABCA02 Sexsmith, J.J. AL 5023 1969-07-04 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 365650 5504350 Lethbridge - University 7 1358
Picradeniopsis oppositifolia picradeniopsis SRank: S1
+++++++++++++++++++++++

Element Code: PDAST76010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1940-09-00
Last Observed: 1940-09-00 ***First Observed:*** 1940-09-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Coaldale; ~3km SE of; Hwy 512; ~2km N of.
General Description: On irrigated land in middle of large wheat field. Infested area about one acre if all together.
Min Elev. (m): 262 ***Max Elev. (m):*** 262 ***Best Source of Info:*** S40HILACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S32RAUNMONCA06 Raup, H.M. & E.C. Abbe NM 60383 1932-09-01
S40HILACONCA01 Hill, K.W. AC 391399 1940-09-18
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 387550 5508100 Coaldale SE7-9-19-4 27 4199
Picradeniopsis oppositifolia picradeniopsis SRank: S1
+++++++++++++++++++++++

Element Code: PDAST76010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1978-07-28
Last Observed: 1978-07-28 ***First Observed:*** 1978-07-28 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Henderson Lake; ~3.5 km WNW of; Fort Whoop-Up, 1.2 km NE of.
General Description: disturbed ground on exposed coulee top
Min Elev. (m): 850 ***Max Elev. (m):*** 850 ***Best Source of Info:*** S78HALPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78HALPMABCA01 Hall, E.C. PM B78.25.1 1978-07-28 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 366750 5506700 Lethbridge 49-42N/112-50W 28 4321
Picradeniopsis oppositifolia picradeniopsis SRank: S1
+++++++++++++++++++++++

Element Code: PDAST76010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1985-06-27
Last Observed: 1985-06-27 ***First Observed:*** 1985-06-27 ***Actual Mapping Precision (m):*** 900 ***Precision Code:*** M
Directions: Onefour, 13.5 km NE of; Cressday, 9 km SW of; Sage Creek.
General Description: eroding badland slope
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Aspect:*** E ***Best Source of Info:*** S85WERUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WERUAABCA02 Wershler, C. UA 098429 1985-06-27 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 546100 5452300 Sage Creek E 20-3-3 W4M 1 4503
Picradeniopsis oppositifolia picradeniopsis SRank: S1

Plantago canescens western ribgrass

Natural Region: Foothills Fescue Grassland
Habitat: Grassland-Unglaciated
Phenology: flowers late May to early June
Specific Search Strategies (if any): exposed pre-glacial gravels on unglaciated summit of Milk River Ridge

Element Occurrences:

Element Code: PDPLN02080 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-05-24
Last Observed: 1986-05-24 ***First Observed:*** 1939-08-17 ***Precision Code:*** M
Directions: Whiskey Gap; Sommerfeldt Ranch.
General Description: Rough fescue grassland. Moist meadow near river
Min Elev. (m): 1280 ***Max Elev. (m):*** 1400 ***Best Source of Info:*** S86JOHCFABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S39MOSACONCA08 Moss, E.H. AC 154328 1939-08-17
S39MOSUAABCA22 Moss, E.H. UA 15948 1939-08-17
S66DEVPMABCA15 de Vries, Bernard PM B68.4.193 1966-06-18 Y
S66DEVUCABCA06 de Vries, B.D. UC 240920 1966-06-13
S86JOHCFABCA05 Johnson, J.D. CF 860200 1986-05-24
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352650 5431700 Whiskey Gap 49 01 30/113 01 21 961
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 002 ***Survey Date:*** 1977-06-22
Last Observed: 1977-06-22 ***First Observed:*** 1977-06-22 ***Precision Code:*** S
Directions: Jasper National Park; Pyramid road.
General Description: Grassland; Soil: Lithic Orthic Eutric Brunisol
Min Elev. (m): 1330 ***Max Elev. (m):*** 1330
Slope: 15.00 ***Aspect:*** SSW ***Best Source of Info:*** S77CORCFABCA14
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77CORCFABCA14 Corns, I. CF 801308 1977-06-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83D16 11 427600 5866000 Pyramid Lake 95 2881
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 003 ***Survey Date:*** 1964-06-13
Last Observed: 1964-06-13 ***First Observed:*** 1964-06-13 ***Precision Code:*** S
Directions: The Gap, 1 mile N along road leading W to; Lunbreck to Longview, beginning by roadsign at junction of road leading from.
General Description: Semi-prairie roadside strip, dry soil
Min Elev. (m): 1265 ***Max Elev. (m):*** 1265 ***Best Source of Info:*** S64DEVACONCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVACONCA07 de Vries, B. AC 440363 1964-06-13
S64DEVUCABCA09 de Vries, B. UC 24093 1964-06-13
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 703450 5520500 Tetley Creek 27 899
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 004 ***Survey Date:*** 1963-08-14
Last Observed: 1963-08-14 ***First Observed:*** 1963-08-14 ***Precision Code:*** M
Directions: Lundbreck, 15 miles N of; Porcupine Hills, near; Callum Creek, on; a big ranch house, near.
General Description: Unfenced range, native grassland.
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280 ***Best Source of Info:*** S63DORACONCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S63DORACONCA08 Dore, W.G. , Tusko, , F., & Ogilvie. AC 440364 1963-08-14
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 705750 5522750 Callum Creek 28 900
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 005 ***Survey Date:*** 1959-08-03
Last Observed: 1959-08-03 ***First Observed:*** 1959-08-03 ***Precision Code:*** M
Directions: Coleman, N of; West Gap; Mountain Valley.
General Description: Sandy Meadow
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370 ***Best Source of Info:*** S59RUSACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S59RUSACONCA01 Russell, R.C. AC 440362 1959-08-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 690000 5527850 The Gap - Oldman River 20 892
Plantago canescens western ribgrass SRank: S2
+++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 006 ***Survey Date:*** 1979-06-05
Last Observed: 1979-06-05 ***First Observed:*** 1979-06-05 ***Precision Code:*** S
Directions: Whaleback Ridge; Black Mountain.
General Description: Dry west facing grassland
Min Elev. (m): 1525 ***Max Elev. (m):*** 1525 ***Aspect:*** W ***Best Source of Info:*** S79WALUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA04 Wallis, C. UA 84593 1979-06-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G16 11 702550 5537500 Black Mountain 16 889
Plantago canescens western ribgrass SRank: S2
+++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 007 ***Survey Date:*** 1974-07-16
Last Observed: 1974-07-16 ***First Observed:*** 1974-07-16 ***Precision Code:*** M
Directions: Hwy 3; B.C. border, 5 miles east of.
General Description: Barren gravel ridge
Min Elev. (m): 1355 ***Max Elev. (m):*** 1355 ***Best Source of Info:*** S74HAIACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74HAIACONCA01 Hainault AC none 1974-07-16
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G10 11 674150 5500600 Sentinel 9 847
Plantago canescens western ribgrass SRank: S2
+++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 008 ***Survey Date:*** 1902-06-25
Last Observed: 1902-06-25 ***First Observed:*** 1902-06-25 ***Precision Code:*** M
Directions: Pincher Creek
General Description: Saline soil
Min Elev. (m): 1130 ***Max Elev. (m):*** 1130 ***Best Source of Info:*** S02XXXACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S02XXXACONCA02 Unknown AC 440368 1902-06-25
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H05 12 286350 5485600 5 1333
Plantago canescens western ribgrass SRank: S2
+++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 009 ***Survey Date:*** 1960-07-14
Last Observed: 1960-07-14 ***First Observed:*** 1960-07-14 ***Precision Code:*** M
Directions: Jasper town, 2 miles east of.
General Description: Dry grassy slope below cliffs
Min Elev. (m): 1065 ***Max Elev. (m):*** 1065 ***Best Source of Info:*** S60PORNMONCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S60PORNMONCA10 Porsild, A.E. NM 266333 1960-07-14
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83D16 11 430000 5858000 Old Fort Point 96 2882
Plantago canescens western ribgrass SRank: S2
+++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 010 ***Survey Date:*** 1961-06-10
Last Observed: 1961-06-10 ***First Observed:*** 1961-06-10 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Hillcrest Mines, 5 km S of; Adanac Road, on.
General Description: Moist areas.
Min Elev. (m): 1493 ***Max Elev. (m):*** 1493 ***Best Source of Info:*** S61JOHALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S61JOHALABCA01 Johnston, A., T.D. Allen & T. Mikkelsen AL 1879 1961-06-10 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 689000 5489000 Bayron Creek 9 828
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 011 ***Survey Date:*** 1989-06-27
Last Observed: 1989-06-27 ***First Observed:*** 1989-06-27 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Cache creek; ~9.5 km W of; Peace River; on N bank of.
General Description: Saline seep on slope. A mosaic of habitats ranging from dry saline to wet saline and some non-saline areas. Occurring with
Hordeum jubatum, Agropyron trachycaulum; Puccinellia nuttalliana; Scirpus pungens; S. paludosus. Non-saline
Min Elev. (m): 270 ***Max Elev. (m):*** 270 ***Aspect:*** S
Other Comments: Elevation of dot (297m) does not correspond with record (270m). ***Best Source of Info:*** S89SCHUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89SCHUAABCA02 Schwarz, A.G. UA 097771 1989-06-27
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
84F10 11 502000 6383500 Cache Creek 57-37'N;116-58'W. 1 4171
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 012 ***Survey Date:*** 1964-06-13
Last Observed: 1964-06-13 ***First Observed:*** 1964-06-13 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Lundbreck
General Description: grassy prairie
Min Elev. (m): 1219 ***Max Elev. (m):*** 1219 ***Best Source of Info:*** S64DEVPMABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVPMABCA08 de Vries, Bernard PM B68.4.475 1964-06-13 Y
S88HASPMABCA08 Hastings, R., Ellis, R.A. PM B88.28.91 1988-06-15 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 704850 5495950 Lundbreck 49 02 N, 113 01W 24 840
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 013 ***Survey Date:*** 1982-06-08
Last Observed: 1982-06-08 ***First Observed:*** 1982-06-08 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Head-Smashed-In Buffalo Jump; Porcupine Hills.
General Description: first major gully N of historic site fence that runs E-W over esc, slope in track through grassland
Min Elev. (m): 1220 ***Max Elev. (m):*** 1220 ***Aspect:*** NE ***Best Source of Info:*** S82CAMPMABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82CAMPMABCA10 Campbell-Snelling, J., Chambers, M. PM B84.1.309 1982-06-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H12 12 308650 5508900 Head Smashed In Buffalo Jump 49-43N/113-39W 3 1376
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 014 ***Survey Date:*** 1982-06-09
Last Observed: 1982-06-09 ***First Observed:*** 1982-06-09 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: McIntyre Ranch; Milk River Ridge.
General Description: somewhat eroded area on grassy slope of the Ridge
Min Elev. (m): 1190 ***Max Elev. (m):*** 1190 ***Aspect:*** S ***Best Source of Info:*** S82HRAPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82HRAPMABCA04 Hrapko, J.O., Kerik, J.C. PM B82.11.66 1982-06-09 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 367100 5453900 Reed Lake 49-13,14N/112-49,50,51W 24 4294
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 015 ***Survey Date:*** 1992-05-27
Last Observed: 1992-05-27 ***First Observed:*** 1991-07-24 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: McIntyre Ranch; Milk River Ridge.
General Description: dry eroding slope
Min Elev. (m): 1250 ***Max Elev. (m):*** 1260 ***Aspect:*** E ***Best Source of Info:*** S91COTPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91COTPMABCA01 Cotterill, P.J. PM B91.34.2 1991-07-24 Y
S92HRAPMABCA01 Hrapko, J.O., Laird, L.D. PM B92.12.4 1992-05-27 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 367700 5452900 Reed Lake 49-13N/112-49W 10 928
Plantago canescens western ribgrass SRank: S2
++++++++++++++++++++++++

Element Code: PDPLN02080 ***Occurrence Code #:*** 016 ***Survey Date:*** 1999-06-18
Last Observed: 1999-06-18 ***First Observed:*** 1998-06-18 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Ross Lake, ~ 5 km S of; North Milk River, 3.5 km N of.
General Description: upland rough fescue along an old truck trail (some disturbance), moderate moisture; Festuca scabrella, Lupinus sericeus, Achillea millefolium
Min Elev. (m): 1380 ***Max Elev. (m):*** 1380
Slope: 0.00 ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 358575 5439700 Ross Lake 6-2-22 W4M 29 5042
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey
U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould
Date Source Abstract Code Observer Occurrence Data
1998-06-18 U98ERN01ABCA Reg Ernst 150 individuals; 100 adults, 50 flowering
1999-06-17 U99ERN02ABCA Reg Ernst 2 additional populations found approximately 1km from where they were found last year; plants range from vegetative to late flowering; population appears to be quite healthy
Plantago canescens western ribgrass SRank: S2

Polanisia dodecandra clammyweed

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Sand Dunes; Slopes-Sandy
Phenology: flowers in July
Specific Search Strategies (if any): search rare silty type dunes (e.g. Turin) and sandy gravelly slopes; also gravel excavations

Element Occurrences:

Element Code: PDCPP08010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-07-00
Last Observed: 1986-07-00 ***First Observed:*** 1986-07-00 ***Precision Code:*** M
Min Elev. (m): 853 ***Max Elev. (m):*** 853
Other Comments: Slide #F361.002, #F361.003 & #F361.001A ***Best Source of Info:*** I86WAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H15 12 388250 5526600 Turin Dunes 1 1398
Source Code Author Publisher Year Title
I86WAL01ABCA Wallis, C. 1986
I86WAL02ABCA Wallis, C. 1986
I86WAL03ABCA Wallis, C. 1986
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan river valley, on bank of; Bull Pen, southwest of
General Description: from subxeric to submesic sites in open sand of eroded bank; general habitat is exposed gravelly areas along river valleys, also gravel pits and roadsides
Min Elev. (m): 625 ***Max Elev. (m):*** 625
Other Comments: at northern limit of it's range
Management Comments: habitat destabilization appears to benefit this species. ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525350 5565400 Brush Flats UTM WL 525350 / 5565400 4 171
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-07-13
Last Observed: 1995-07-13 ***First Observed:*** 1988-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River valley; Bull Pen, about 1.5 km W of; from erosional sandy crests of river valley slump blocks to NW of this site; and on upper slope gravels to E end of slump
General Description: erosional sandy crests of the river valley slump blocks; upper slope gravels
Min Elev. (m): 663 ***Max Elev. (m):*** 670
Other Comments: second source from Wallis (1994) is not clear where it is from(report, personal comm.?...) ***Best Source of Info:*** S95MACPMABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACPMABCA07 Macdonald, I.D. PM B95.9.36 1995-07-13 Y flowers, fruits, on small plants
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 523950 5566700 Brush Flats UTM 523950 / 5566700 and UTM WL ca 524100 / 5566700;50-15'08"N/110-39'50"W 8 193
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA; over 100 plants on upper slope gravels...
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1972-07-19
Last Observed: 1972-07-19 ***First Observed:*** 1972-07-19 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Brush Flats, 700 m S of; Old Channel Lake, 800 m N of.
Min Elev. (m): 655 ***Max Elev. (m):*** 655 ***Best Source of Info:*** S72JOHPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72JOHPMABCA02 Johnson, H. PM B72.39.39 1972-07-19 Y flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525000 5564450 Old Channel Lake 50 14/110 39 10 176
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-07-17
Last Observed: 1997-07-17 ***First Observed:*** 1997-07-17 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Lethbridge, 3 km NW of; Hardieville, 2.5 km W of; Alexandra Wilderness Park.
General Description: sandy, coarse substrate (deposition from 1995 flood), located on floodplain of river; Oryzopsis hymenoides, Salsola kali, Euphorbia and other weedy species
Min Elev. (m): 770 ***Max Elev. (m):*** 770
Management Comments: Flooding and competition from non-native species. ***Best Source of Info:*** PNDSAU02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 365650 5511000 Hardieville 3TM 81870.13 5511880.28; 81833.42 5511952.30 16 3786
Source Code Author Publisher Year Title
U97SAU01ABCA Saunders, Liz 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-07-17 UND97SAU01AB Liz Saunders approx. 50 individuals
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1950-07-21
Last Observed: 1950-07-21 ***First Observed:*** 1950-07-21 ***Precision Code:*** M
Directions: Redcliff, SW of; South Saskatchewan River, bank of.
General Description: gravelly excavation on side of arid bank down to river
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S50DORACONCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50DORACONCA12 Dore, W.G. & A.J. Breitung AC 136725 1949-08-22 sticky annual; petals white; calyx and stamen red.
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 513550 5545050 Redcliff 14 3831
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1914-07-31
Last Observed: 1914-07-31 ***First Observed:*** 1914-07-31 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Medicine Hat; Police Point Park
Min Elev. (m): 650 ***Max Elev. (m):*** 650 ***Best Source of Info:*** S14FYLACONCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14FYLACONCA04 Fyles, F. AC 567731 1914-07-31
S14FYLACONCA05 Fyles, F. AC 567732 1914-07-31
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 ***Occurrence Code #:*** 008 ***Survey Date:*** 1994-07-08
Last Observed: 1994-07-08 ***First Observed:*** 1994-07-08 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: CFB Suffield: 33km N of Medicine Hat; Fish Creek Area; 5km E of Van Will Corral.
General Description: South Saskatchewan river valley floodplain; submesic sand of eroded terrace face.
Min Elev. (m): 620 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA06 Macdonald, I.D. PM B94.4.523 1994-07-07 Y
S94MACPMABCA08 Macdonald, I.D. PM B94.4.559 1994-07-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Polanisia dodecandra clammyweed SRank: S2
++++++++++++++++++++++

Element Code: PDCPP08010 **Occurrence Code #:** 009 **Survey Date:** 1968-08-24
Last Observed: 1968-08-24 **First Observed:** 1968-08-24 **Actual Mapping Precision (m):** 1800 **Precision Code:** M
Directions: Steveville, 3 km NW of.
General Description: dry stony hillside
Min Elev. (m): 700 **Max Elev. (m):** 700 **Best Source of Info:** S68OSTUAABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68OSTUAABCA07 Ostafichuk, M. UA 81852 1968-08-24 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 456600 5634350 Steveville 50 52/111 37 14 4486
Polanisia dodecandra clammyweed SRank: S2

Polygonum polygaloides ssp confertiflorum Watson's knotweed

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers in June
Specific Search Strategies (if any): detectable well past flowering season; search dried up edges of sandy wetlands, especially where hummocky; may be present mid-way up hummocks

Element Occurrences:

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 001 ***Survey Date:*** 1976-08-17
Last Observed: 1976-08-17 ***First Observed:*** 1976-08-17 ***Precision Code:*** S
Directions: Grassy Mtn., hill immediately S of, S side of.
General Description: road edges though a meadow heavily grazed
Min Elev. (m): 1465 ***Max Elev. (m):*** 1465 ***Aspect:*** S ***Best Source of Info:*** S76CORUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76CORUCABCA01 Corbin, J. & D. Jacques UC 42238 1976-08-17 [100% flower?]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G09 11 685800 5503600 Grassy Mountain UTM 11UPF858036 21 837
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 002 ***Survey Date:*** 1966-06-02
Last Observed: 1966-06-02 ***First Observed:*** 1966-06-02 ***Precision Code:*** M
Directions: Pakowki, NW of.
General Description: moist hollow prairies
Min Elev. (m): 836 ***Max Elev. (m):*** 836 ***Best Source of Info:*** S66WHEUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66WHEUCABCA01 Wheeler, G.W. UC 36468 1966-06-02 ? 100% flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 502223 5494331 Pakowki 1 143
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 003 ***Survey Date:*** 1987-06-20
Last Observed: 1987-06-20 ***First Observed:*** 1987-06-20 ***Precision Code:*** M
Directions: Beauvais Lake Provincial Park, S of.
General Description: moist area near small stream, imperfectly drained
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Best Source of Info:*** S87SCOCFABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S87SCOCFABCA02 Scotter, G.W. CF 880139 1987-06-20 Flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 713200 5475350 Beauvias Lake Provincial Park Lat/Long: 49 24'/ 114 04' 172 798
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 004 ***Survey Date:*** 1989-07-03
Last Observed: 1989-07-03 ***First Observed:*** 1989-07-03 ***Precision Code:*** S
Directions: Milk River Natural Area.
General Description: ephemeral sandy wetland
Min Elev. (m): 983 ***Max Elev. (m):*** 983 ***Best Source of Info:*** S89WALPPABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA07 Wallis, C. PP 2831 1989-07-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 520873 5428534 Milk River Ecological Reserve
LSD 13 13 24
Date Source Abstract Code Observer Occurrence Data
Very narrow environmental range includes the flooded flats of the ephermal wetland & occurs on somewhat exposed sandy soil on hummocks 15-30cm above the surrounding flat surface , 25 plants. Prefers ungrazed sites
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 005 ***Survey Date:*** 1990-06-29
Last Observed: 1990-06-29 ***First Observed:*** 1990-06-29 ***Precision Code:*** S
Directions: Vauxhall Association grazing lease; GRP788335; Scope Field.
General Description: growing with Plantago elongata/Navarretia minima/Carex athrostachya/Spergularia marina/Alopecurus carolinianus/Veronica persica
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Size of Occurrence:*** 22.00
Management Comments: Depression could be fenced out to ensure seed set. Area not over utilized by livestock as it seldom would contain water. ***Best Source of Info:*** UNDESR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L04 12 438300 5547925 Hays 1 181
Source Code Author Publisher Year Title
UNDESR01ABCA Eastern Slopes Rangeland Consultants An Alopecurus carolinianus Walt. level depression near Vauxhall
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
prominence value of 3.8%; many thousands of individual plants(UNDESR01ABCA)
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 006 ***Survey Date:*** 1989-07-14
Last Observed: 1989-07-14 ***First Observed:*** 1989-07-14 ***Precision Code:*** M
Directions: Bow City, about 10 km W of; Hwy. 539, off.
General Description: Stipa comata grassland
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I08 12 404350 5586800 Bow City 1 1418
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: CFB Suffield; ~3 km W of W border of; E side of Outer Rainy Hill.
General Description: common; ephemeral wetlands
Min Elev. (m): 792 ***Max Elev. (m):*** 792 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484700 5591350 Outer Rainy Hill LS#37;km:245.7;LLD:SW 5-32-17-9-4 4 4019
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: CFB Suffield; ~3 km W of W border of. Outer Rainy Hill; on SE side of.
General Description: common; ephemeral wetlands
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484750 5588500 Outer Rainy Hill LS#38;km:248.3;LLD:NW 12-20 17-9-4 5 4020
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: CFB Suffield; ~3 km W of; Outer Rainy Hill; SE of.
General Description: common; ephemeral wetlands
Min Elev. (m): 792 ***Max Elev. (m):*** 792 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484750 5586400 Outer Rainy Hill LS#38;km:250.5;LLD:SW 5-17-17-9-4 6 4021
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 010 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; ~3 km W of W border of; Outer Rainy Hill; SE of.
General Description: common; ephemeral wetlands
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484750 5584000 Outer Rainy Hill LS# 38, Km 252.8,NW13- 5-17-9-4 and LS#39;
km:255.5; LLD: SW 32 16-9-4 and
LS#37;km:245.7;LLD:SW 5-32-17-9-4
7 4022
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 011 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield Airfield; ~12.25 km NW of; CfB Suffield; ~3 km W of W border of.
General Description: common; ephemeral wetlands
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484800 5580850 Outer Rainy Hill LS#39; km:256;LLD:NW 13-29 16-9-4 8 4023
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 012 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~2.5 km NW of; Hwy 1; ~ 400 m W of.
General Description: common; ephemeral wetlands
Min Elev. (m): 754 ***Max Elev. (m):*** 754 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 486400 5564300 Suffield LS 41, Km 273.3, NW 12-4-15-9-4 9 4024
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 013 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~ 8.5 km SE of; S. Saskatchewan River; ~ 7.75 km N of.
General Description: common; ephemeral wetlands
Min Elev. (m): 770 ***Max Elev. (m):*** 770 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 490500 5554000 Suffield LS#43; km: 284.6; LLD: SW 6-2-14-9-4 10 4025
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 014 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~ 34.75 km SE of; S. Saskatchewan River; ~ 4.5 km N of.
General Description: common; ephemeral wetlands
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 497300 5544850 South Saskatchewan River LS#45; km: 296; LLD: NE 10-4-13-8-4 11 4026
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 015 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Manyberries; 17 km SE of; S Manyberries Creek; 4 km S of.
General Description: common; ephemeral wetlands
Min Elev. (m): 1052 ***Max Elev. (m):*** 1052 ***Aspect:*** N ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 535398 5482031 Cypress Hills KP 372.1 & 372.3, NE14-20 6-4-4 17 3990
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 016 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hwy 48; ~ 7 km W of; Bare Creek; ~ 2.75 km W of.
General Description: common; ephemeral wetlands
Min Elev. (m): 1074 ***Max Elev. (m):*** 1074 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 546050 5465150 Bare Creek LS:59; km:392.6; LLD:SE:8-32 4-3-4 18 4027
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 017 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bain; ~ 6 km NE of; Bare Creek; ~ 2.5 km W of.
General Description: common; ephemeral wetlands
Min Elev. (m): 1067 ***Max Elev. (m):*** 1067 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 547150 5463100 Bare Creek LS 59; km 394.9; LLD SE 2-28 5-3-4 20 4028
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 018 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Bain; ~ 5.25 km NW of; Bare Creek; ~ 2.75 km W of.
General Description: common; ephemeral wetlands
Min Elev. (m): 1013 ***Max Elev. (m):*** 1013 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 549150 5458500 Bare Creek LS#59;km399.6;LLD:SE 10 4-3-4 21 4029
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 019 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Milk River Lake; ~ 4 km NW of; NW end of; Hwy 48; ~2.5 km W of.
General Description: common; ephemeral wetlands
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552150 5434850 Milk River Lake LS#64; km 424.3; LLD; NE 1-25 1-3-4. 28 4030
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
+++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 020 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Indian Creek, 2 km E of; Cabin lake, 1 km W of.
Min Elev. (m): 731 ***Max Elev. (m):*** 731 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M03 12 486300 5653350 Indian Creek LS # 28, Km 181.3, NE 9 24-9-4 2 4144
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 021 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Schuler, 13 km SW of; Arcel "A" facility, 500 m NE of.
General Description: flat undulating, subxeric loam, in trampled barrens of soil, Needle-and-thread, Blue Grama, Western Sea-blite [community MH8-B]
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Size of Occurrence:*** 0.06
Management Comments: disturbance to the alkaline barrens surface or water table by construction could affect this species
Best Source of Info: U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 551750 5573475 Schuler SW 6-16-2-4 20 4243
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Date Source Abstract Code Observer Occurrence Data
1996-00-00 U98FRY01ABCA Gina Fryer probably over 100 plants at 20X30 m
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 022 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Jenner, 14 km S of; Hwy 884, W of.
General Description: depression basin, with subhygric clayloam, in drawdown marsh fringe meadow of Western Wheat Grass, Foxtail Barley, Creeping Prairie Sagewort [community A17-E]
Min Elev. (m): 808 ***Max Elev. (m):*** 808 ***Size of Occurrence:*** 0.01
Management Comments: disturbance to the alkaline barrens surface or water table by construction could affect this species
Best Source of Info: U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L11 12 486800 5607325 Jenner SE 21-19-9-4 3 4244
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Date Source Abstract Code Observer Occurrence Data
1996-00-00 U98FRY01ABCA Gina Fryer over 50 plants in 5X20m area
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 023 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Morrin Bridge Provincial Recreation Area, 5 km S of; Red Deer River, on W side of.
General Description: river valley basin, on subxeric alkaline clayloam, on open barrens of soil, Brittle Prickly Pear, Western Wheat Grass, lichen, Pasture Sagewort, Tumblegrass [community GP7-L1]
Min Elev. (m): 709 ***Max Elev. (m):*** 709
Other Comments: over 150 plants in small groups spread over 75 m of pipeline corridor; population extends both sides of corridor
Management Comments: disturbance to the alkaline barrens surface or water table by construction could affect this species
Best Source of Info: U98FRY01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P10 12 369700 5719000 Morrin Bridge Provincial Recreation Area SW 34-30-21-4 3 4245
Source Code Author Publisher Year Title
U98FRY01ABCA Fryer, Gina 1998 Memo from Gina Fryer to John Rintoul: rare plant locations for the Palliser Pipeline Project
Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2
++++++++++++++++++++++

Element Code: PDPGN0L1Y1 ***Occurrence Code #:*** 024 ***Survey Date:*** 1999-08-11

Last Observed: 1999-08-11 ***First Observed:*** 1999-08-11 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.

General Description: dry mixed grass prairie: around boulder used by cattle for rubbing, in shallow edge of wetland; weedy with > 50% bare ground; Lepi den, Agro sca, Agro smi,Guit sar, Arter lud and Poly wat.

Min Elev. (m): 808 ***Max Elev. (m):*** 808

Other Comments: Further pipeline construction should avoid this wetland completely.

Management Comments: Pipeline construction: this wetland has numerous rare species (Elan tri, Hype maj, Cent min, Lila sci reported 97/98. ***Best Source of Info:*** U99BUS02ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908

Source Code Author Publisher Year Title

U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms

Date Source Abstract Code Observer Occurrence Data

1999-08-11 U99BUS02ABCA Dana Bush abundant, veg = 6, repr. = 7

Polygonum polygaloides ssp confertiflorum Watson's knotweed SRank: S2

Potamogeton foliosus leafy pondweed

Natural Region: Mixedgrass
Habitat: Wetland
Phenology: most easily detected in late July/August
Specific Search Strategies (if any): no EO in grassland for dot in Moss; likely in irrigation district wetlands

Element Occurrences:

Element Code: PMPOT030B0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1990-08-00
Last Observed: 1990-08-00 ***First Observed:*** 1990-08-00 ***Precision Code:*** U
Directions: PLOT CO2, NEAR
Min Elev. (m): 1298 ***Max Elev. (m):*** 1298 ***Best Source of Info:*** R90TIM01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O03 11 617600 5658800 Canmore Flats Natural Area PLOT CO2 63 1941
Source Code Author Publisher Year Title
R90TIM01ABCA Timoney, Kevin P. Alberta Forestry, Lands and Wildlife 1990 Biophysical Inventory of the Canmore Flats Natural Area.
Potamogeton foliosus leafy pondweed SRank: S2
++++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1996-08-14
Last Observed: 1996-08-14 ***First Observed:*** 1996-08-14 ***Precision Code:*** S
Directions: Whitetail Trail, small pond on E side of
General Description: Small pond without duckweed mat due to some mineralization factor, mainly in water 0.3 - 1.0 m deep ;submerged aquatic
community dominated by P. foliosus, Utricualria vulgaris and.
Min Elev. (m): 710 ***Max Elev. (m):*** 710
Management Comments: No current threat. ***Best Source of Info:*** U96GRI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H10 12 381500 5932125 Blackfoot Lake Floristic plot #30; LSD 15; 53 31 29/112 47 16, and Plot bf65 - 15-30-52-19 W4M 96 3317
Source Code Author Publisher Year Title
U96GRI01ABCA Griffiths, G.C.D. 1996 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
[vegetative, fruiting]; hundreds of individuals
Potamogeton foliosus leafy pondweed SRank: S2
++++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1996-09-03
Last Observed: 1996-09-03 ***First Observed:*** 1996-09-03 ***Precision Code:*** S
Directions: Detour Lake, S shore of.
General Description: Small sheltered lake with extensive duckweed mat around peripheral situated in deep morainal depression, with water level stabilized by beaver dams on outlet (sample from water....
Min Elev. (m): 750 ***Max Elev. (m):*** 750
Management Comments: Interference with beaver dams could change the habitat. ***Best Source of Info:*** U96GRI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H07 12 374150 5927150 Cooking Lake-Blackfoot Recreation Area Floristic Plot # 42; LSD 13; 53 28 55/112 53 58. 25 3232
Source Code Author Publisher Year Title
U96GRI01ABCA Griffiths, G.C.D. 1996 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
floating fragments, about 50 in sample; about 50 vegetative
Potamogeton foliosus leafy pondweed SRank: S2
++++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-08-01

Last Observed: 1996-08-01 ***First Observed:*** 1996-08-01 ***Precision Code:*** S

Directions: Wye Knott Village, immediately W of; Range Road 213, on; Hayley's House, drive to; house, pond immediately W below.

General Description: Small pond at bottom of morainal depression (average water depth about 0.5m).

Min Elev. (m): 755 ***Max Elev. (m):*** 755 ***Best Source of Info:*** S96GRIUAABCA03

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S96GRIUAABCA03 Griffiths, G.C.D. UA 098959 1996-08-01 ? vegetative only, no fruit found; dominant submerged aquatic plant throughout this pond

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

83H06 12 365650 5925850 Cooking Lake LSD 16; 53 28/113 01 30. 10 3212

Potamogeton foliosus leafy pondweed SRank: S2

+++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1965-08-26

Last Observed: 1965-08-26 ***First Observed:*** 1961-07-29 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M

Directions: Iosegun Lake, 6 km W of

General Description: in 1' of water in borrow pit, sandy soil. Large dugout pond

Min Elev. (m): 790 ***Max Elev. (m):*** 790 ***Best Source of Info:*** S65PEGPMABCA04

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S61MOSNMONCA09 Moss, E.H. NM 275039 1961-07-29

S65PEGPMABCA04 Pegg, George R. PM B88.1.805 1965-08-26 Y fruits present

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

83K07 11 502000 6036200 Little Smoky River 54 27N/116 58W 10 3512

Potamogeton foliosus leafy pondweed SRank: S2

+++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1929-08-20

Last Observed: 1929-08-20 ***First Observed:*** 1929-08-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Moose Lake, 16 miles east of

General Description: sink hole

Min Elev. (m): 310 ***Max Elev. (m):*** 310 ***Best Source of Info:*** S29RAUNMONCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S29RAUNMONCA01 Raup, Hugh M. NM 7401 1929-08-20

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

84P10 12 402600 6597200 Upland Lake 59-30'20" N, 112-43;30" W. 2 4086

Potamogeton foliosus leafy pondweed SRank: S2

+++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1929-08-14

Last Observed: 1929-08-14 ***First Observed:*** 1929-08-14 ***Actual Mapping Precision (m):*** 1600 ***Precision Code:*** M

Directions: Loon Lake; ~6 km NNE of; Ninishith Hills; ~500 m W of Esker on W side of the.

General Description: lake district

Min Elev. (m): 290 ***Max Elev. (m):*** 290

Other Comments: S29RAUNMONCA02 - Det by Robert R. Haynes as Potamogeton foliosus var foliosus 1973 ***Best Source of Info:*** S29RAUNMONCA02

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S29RAUNMONCA02 Raup, Hugh M. NM 7402 1929-08-14 Y

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

84P11 12 380725 6608600 Wood Buffalo National Park 59-36N/113-07W 1 4391

Source Code Author Publisher Year Title

A74HAY01ABCA Haynes, R. R. Rhodora 76:564-649 1974 A revision of the North American Potamogeton subsection Pusilli (Potamogetonaceae)

Potamogeton foliosus leafy pondweed SRank: S2

+++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1991-08-01

Last Observed: 1991-08-01 ***First Observed:*** 1991-07-27 ***Actual Mapping Precision (m):*** 300 ***Precision Code:*** M

Directions: La Saline Natural Area; Saline Lake.

General Description: amongst the cattail clumps

Min Elev. (m): 245 ***Max Elev. (m):*** 245 ***Best Source of Info:*** R91TIM01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

74E04 12 467150 6325750 Saline Lake R2-3 and 5 12 4394

Source Code Author Publisher Year Title

R91TIM01ABCA Timoney, Kevin P and Anne L.
Robinson
Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area

Potamogeton foliosus leafy pondweed SRank: S2

Element Code: PMPOT030B0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1960-07-30
Last Observed: 1960-07-30 ***First Observed:*** 1948-09-02 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Sangudo.
General Description: shallow water, roadside pool and small lake
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S48MOSUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S48MOSUAABCA08 Moss, E.H. UA 864 1948-09-02 Y a few fruits; [fruits with apprec. marginal keels]
S60MOSUAABCA12 Moss, E.H. UA 788 1960-07-30 Y fruits present-keels present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G15 11 639000 5973000 Sangudo 13 4459
Potamogeton foliosus leafy pondweed SRank: S2
++++++++++++++++++++++++

Element Code: PMPOT030B0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1960-07-26
Last Observed: 1960-07-26 ***First Observed:*** 1960-07-26 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Glenevis
General Description: small pond
Min Elev. (m): 730 ***Max Elev. (m):*** 730
Other Comments: fruits, keels present ***Best Source of Info:*** S60PEGUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S60PEGUAABCA06 Pegg, George UA 789 1960-07-26 Y fruits--keels present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83G15 11 664300 5962300 Glenevis 14 3161
Potamogeton foliosus leafy pondweed SRank: S2

Potentilla finitima **sandhills cinquefoil**

Natural Region: Foothills Fescue Grassland
Habitat: Grassland-Sandy
Phenology: flowering in late June and early July
Specific Search Strategies (if any): distinctive, detectable into October; search minor disturbances in sand plain settings

Element Occurrences:

Element Code: PDROS1B2T0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1986-07-22
Last Observed: 1986-07-22 ***First Observed:*** 1976-07-17 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Calgary, University Heights and Shaganappi Trail, between
General Description: disturbed prairie; on path near concinna triangle
Min Elev. (m): 1110 ***Max Elev. (m):*** 1110 ***Best Source of Info:*** S86HALUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76HALACONCA01 Hallworth, B.M. AC 145981 1976-07-17
S76HALUAABCA01 Hallworth, B.M. UA 58385 1976-07-17 Y
S86HALUCABCA01 Hallworth, B.M. UC 49117 1986-07-22 ? blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 700000 5662000 Calgary - University Heights 28 1877
Potentilla finitima sandhills cinquefoil SRank: S1
++++++++++++++++++++++

Element Code: PDROS1B2T0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1972-07-14
Last Observed: 1972-07-14 ***First Observed:*** 1972-07-14 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hardisty, 2.5 km SE of; Campground.
General Description: open grassy area
Min Elev. (m): 610 ***Max Elev. (m):*** 610 ***Best Source of Info:*** S72KOHUAABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72KOHUAABCA04 Kohli, B. UA 56943 1972-07-14 Y vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 479550 5833350 Hardisty 4 4493
Potentilla finitima sandhills cinquefoil SRank: S1
++++++++++++++++++++++

Element Code: PDROS1B2T0 ***Occurrence Code #:*** 005 ***Survey Date:*** 2000-00-00
Last Observed: 2000-00-00 ***First Observed:*** 2000-00-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Calgary, N of; Beddington Creek, W side of
General Description: west side of the large drainage in two closely situated areas, in slightly disturbed upland fescue grassland
Min Elev. (m): 1097 ***Max Elev. (m):*** 1097
Other Comments: 1 plant at UTME 704416 UTMN 5671647 (NAD27); 25 plants at UTME 704478 UTMN 5671702 (NAD27), specimen taken ***Best Source of Info:*** U00WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 704416 5671647 Beddington Creek 49
Source Code Author Publisher Year Title
U00WAL01ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Panorama Hills Stage 3
Potentilla finitima sandhills cinquefoil SRank: S1

Potentilla paradoxa bushy cinquefoil

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers late June to early August
Specific Search Strategies (if any): gravelly shores of rivers where there is some residual moisture; sandy/rocky slough edges at high water mark

Element Occurrences:

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1995-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along the
General Description: subhygric sites on the shore mud flat barrens and backshore successional meadows
Min Elev. (m): 693 ***Max Elev. (m):*** 693 ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 537550 5589500 South Saskatchewan River UTM WL 537550 / 5589500 5 208
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
infrequent in SNWA
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1987-00-00
Last Observed: 1987-00-00 ***First Observed:*** 1977-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area, outside of; Murphys Horn, due south of; Bull Spring Coulee, mouth of
General Description: Subhygric sites on the shore mud flat barrens and backshore successional meadows
Min Elev. (m): 610 ***Max Elev. (m):*** 610
Other Comments: Information from Cottonwood Consultants (1987) ***Best Source of Info:*** U96MAC01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77CORUCABCA04 Corbin J. & D. Jaques UC none 1977-00-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 541450 5584950 Bull Springs Coulee 6 209
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
infrequent in SNWA
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1990-09-20
Last Observed: 1990-09-20 ***First Observed:*** 1990-07-24 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Dinosaur P.P; S end of.
General Description: Bank near slough edge, shaded; 10 plants in population.
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S90ROMUCABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90ROMUCABCA07 Romuld, M. UC 49466 1990-09-20 ?
S90ROMUCABCA08 Romuld, M. UC 49467 1990-07-24 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L11 12 465600 5620150 Dinosaur Provincial Park Site 27. 1 231
Source Code Author Publisher Year Title
U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bowell; ~15km SW of; S Saskatchewan River; on N shore of.
General Description: Not re-located.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1914-07-28
Last Observed: 1914-07-28 ***First Observed:*** 1914-07-28 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Medicine Hat; Police Point.
General Description: prairie
Min Elev. (m): 650 ***Max Elev. (m):*** 650 ***Best Source of Info:*** S14FYLACONCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14FYLACONCA06 Fyles, F. AC none 1914-07-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525800 5543150 Medicine Hat Lat/Long: 50 03/110 38 2 169
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1950-07-21
Last Observed: 1950-07-21 ***First Observed:*** 1950-07-21 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Redcliff, SW of; South Saskatchewan River, bank of.
Min Elev. (m): 670 ***Max Elev. (m):*** 670 ***Best Source of Info:*** S50DORACONCA23
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50DORACONCA23 Dore, W. G. & A.J. Breitung AC none 1950-07-21
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 513550 5545050 Redcliff 14 3831
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1935-07-00
Last Observed: 1935-07-00 ***First Observed:*** 1935-07-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Vulcan; 7.25km SE of; Kirkcaldy.
Min Elev. (m): 1010 ***Max Elev. (m):*** 1010 ***Best Source of Info:*** S35KAWPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35KAWPMABCA04 Kawamura, Y. PM B65.4.121 1935-07-00 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I06 12 341050 5577950 Kirkcaldy 50-20N/113-14W 2 4242
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1991-08-14
Last Observed: 1991-08-14 ***First Observed:*** 1990-08-10 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: North Milk River; ~9.5km North of; Ross Lake; 100 m North of.
General Description: Sandy soil on floodplain. With Hordeum jubatum on saline moist area near North-East shore.
Min Elev. (m): 1310 ***Max Elev. (m):*** 1320 ***Best Source of Info:*** S90HRAPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90HRAPMABCA03 Hrapko, J.O., Toogood, V.L. PM B90.54.9 1990-08-10 Y
S91HRAPMABCA09 Hrapko, J.O. PM B91.48.1 1991-08-14 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 359550 5446350 Ross Lake 49-9.5N/112-55.5W 23 4251
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1994-06-29
Last Observed: 1994-06-29 ***First Observed:*** 1994-06-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Buffalo Road; 6.15 km E of; North Saskatchewan River; ~100 m N of.
General Description: River backshore terrace, subsuccessional meadow of Agropyron trachycaulum, Hordeum jubatum, Equisetum laevigatum, Xanthium strumarium, Phalaris arundinacea, Mentha arvensis, Solidago gigantea, Asclepias speciosa, Medicago
Min Elev. (m): 630 ***Max Elev. (m):*** 630
Other Comments: UTM and Lat/ Long do not agree ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA03 Macdonald, I.D. PM B94.4.404B 1994-06-29 Y
S94MACPMABCA30 Macdonald, I.D. PM B94.4.387 1994-06-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 526550 5566550 CFB Suffield 50-15'05"N/110-37'40"W 22 4252
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1995-08-08
Last Observed: 1995-08-08 ***First Observed:*** 1995-08-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bingville Road; ~1.75km E of; Coyote Road (route 2); ~1.4km N of.
General Description: recessional shallow lake shoreline
Min Elev. (m): 700 ***Max Elev. (m):*** 700 ***Best Source of Info:*** S95ADAPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95ADAPMABCA01 Adams, G. PM B95.10.16 1995-08-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 513975 5570200 CFB Suffield 50-17'05N/110-48'15W 23 4253
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1994-06-20
Last Observed: 1994-06-20 ***First Observed:*** 1976-07-19 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: CFB Suffield; Medicine Hat, 47 km N of; Ypres Area; Watching Hill, 4 km S of; Sherwood Forest, vicinity of.
General Description: rip backshore ***Slope:*** subhygric successional meadow of Agropyron repens, Poa pal, Phal aru, Sali exi, Pote ans, Care lan, Equi arv, Scir pun, M arv, Lyco asp, Lyco ame.
Min Elev. (m): 615 ***Max Elev. (m):*** 615 ***Best Source of Info:*** S94MACPMABCA29
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76CORUAABCA05 Corbin, John, Jaques, Dennis UA 90260 1976-07-19 Y fruits
S94MACPMABCA29 Macdonald, I.D. PM B94.4.222A 1994-06-20 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 529850 5590075 CFB-Suffield 50-27'50"N/110-34'50"W 30 4332
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1994-07-08
Last Observed: 1994-07-08 ***First Observed:*** 1994-07-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield, Medicine Hat, 33 km NNE of; Fish Creek; Van Will Corral, 5 km E of.
General Description: river backshore ***Slope:*** subhygric meadow of Agro smi, Iva axi, Xant str, Hord jub, Rori syl, Poa pal, Rume mar, Pote ans, Plan maj, aut
Min Elev. (m): 620 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA31 Macdonald, I.D. PM B94.4.540 1994-07-08 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 527200 5577200 Cottonwood Grove 50-20'55"N/110-37'00"W 13 198
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1994-07-07
Last Observed: 1994-07-07 ***First Observed:*** 1994-07-07 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bull Springs Coulee, ~5.5 km NW of mouth of; S Saskatchewan River; ~50 m E of.
General Description: river backshore terrace: mesic meadow of Agro smi, Glycr lep, Xant str, Equi lae, Phal aru, Ascl spe, Pote par, Poa pal, Elym can, Rori.
Min Elev. (m): 610 ***Max Elev. (m):*** 700 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA32 Macdonald, I.D. PM B94.4.487 1994-07-07 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 537600 5588900 CFB Suffield 50-27'10"N/110-28'20"W 27 4340
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1994-08-30
Last Observed: 1994-08-30 ***First Observed:*** 1994-08-30 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Watching Hill; ~8.75 km SSE of; S Saskatchewan River; ~100 m W of.
General Description: river backshore ***Slope:*** subhygric meadow of Cheno sal, Xant str, Echi cru, Rume mar, Gnap uli, Pote par, Poly amp, Alop aeq, Equi arv.
Min Elev. (m): 615 ***Max Elev. (m):*** 615 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA33 Macdonald, I.D. PM B94.4.649 1994-08-30 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 528875 5583150 CFB Suffield 50-24'05"N/110-35'45"W. 32 4341
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1946-08-08
Last Observed: 1946-08-08 ***First Observed:*** 1946-08-08 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Little Fish Lake.
General Description: lake shore, stony sandy flats
Min Elev. (m): 905 ***Max Elev. (m):*** 905 ***Best Source of Info:*** S46MOSUAABCA34
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S46MOSUAABCA34 Moss, E.H. UA 11020 1946-08-08 Y fruits; "prostrate spreading"
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 415000 5692800 Little Fish Lake 9 4441
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1976-07-17
Last Observed: 1976-07-17 ***First Observed:*** 1976-07-17 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Milk River Lake, just N of.
General Description: moist slough bank
Min Elev. (m): 860 ***Max Elev. (m):*** 860 ***Best Source of Info:*** S76KLAUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA08 Klar, A. UA 80450 1976-07-17 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 555000 5431000 Milk River Lake 49 02/110 15 4 4504
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1976-07-12
Last Observed: 1976-07-12 ***First Observed:*** 1976-07-12 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Schuler, 8 km W of.
General Description: roadside
Min Elev. (m): 845 ***Max Elev. (m):*** 845 ***Best Source of Info:*** S76KLAUAABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA11 Klar, Andrew UA 80439 1976-07-12 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 556000 5576400 Schuler 50 20/110 13 13 4505
Potentilla paradoxa bushy cinquefoil SRank: S2
+++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1978-08-12
Last Observed: 1978-08-12 ***First Observed:*** 1978-08-12 ***Actual Mapping Precision (m):*** 700 ***Precision Code:*** M
Directions: Reesor Lake, 2.5 km N of.
General Description: small dried up slough in rolling moraine, wet in spring; Hord jub predominates, with Eleo pal, Junc bal, Agro sub, Pucc nutt
Min Elev. (m): 1189 ***Max Elev. (m):*** 1189 ***Best Source of Info:*** S78BRAUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78BRAUAABCA06 Bradley, C. UA 84166 1978-08-12 Y flowers and fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 564922 5503982 Reesor Lake 32-8-1 W4M 51 4514
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 3.5 km N of; Lost River, 2.5 km S of.
General Description: dessicated edge of large slough
Min Elev. (m): 890 ***Max Elev. (m):*** 890 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 536123 5430685 Lost River 34 4557
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Potentilla paradoxa bushy cinquefoil SRank: S2
++++++++++++++++++++++

Element Code: PDROS1B1A0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Paradis Valley, 6.75 km ENE of; N half of sect.11-Tp47-R2-W4M
General Description: subsaline meadow
Min Elev. (m): 640 ***Max Elev. (m):*** 640
Other Comments: abundant in this meadow
Management Comments: grazing in meadow; recommend survey in wetter years to define site significance ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E01 12 554000 5877000 Paradise Valley N1/2 Sect.11-Tp47-R2-W4M 3 6017
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report in-house
Potentilla paradoxa bushy cinquefoil SRank: S2

***Potentilla plattensis* low cinquefoil**

Natural Region: Northern Fescue Grassland
Habitat: Grassland-Sandy
Phenology: flowers in late June-early July
Specific Search Strategies (if any): conduct searches in conjunction with *Lobelia spicata* surveys (same location)

Element Occurrences:

Element Code: PDROS1B1E0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1942-07-01
Last Observed: 1942-07-01 ***First Observed:*** 1942-07-01 ***Precision Code:*** S
General Description: Prairie grassland
Min Elev. (m): 815 ***Max Elev. (m):*** 815 ***Best Source of Info:*** S42BRIUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S42BRIUAABCA01 Brinkman, A.H. UA 99751 1941-07-01 Flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P16 12 417550 5736600 Victoria Lake 3 2299
Potentilla plattensis low cinquefoil SRank: S1
+++++++++++++++++++++++

Element Code: PDROS1B1E0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1942-06-01
Last Observed: 1942-06-01 ***First Observed:*** 1942-06-01 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Craigmyle
General Description: Prairie grassland
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Best Source of Info:*** S42BRIACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S42BRIACONCA01 Brinkman, A.H. AC 132300 1942-06-01
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P09 12 413950 5724700 Craigmyle 1 4121
Potentilla plattensis low cinquefoil SRank: S1
+++++++++++++++++++++++

Element Code: PDROS1B1E0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1943-06-18
Last Observed: 1943-06-18 ***First Observed:*** 1943-06-18 ***Actual Mapping Precision (m):*** 300 ***Precision Code:*** M
Directions: Craigmyle, 8 mi N of; Nelson's Draw
General Description: among grass prairie
Min Elev. (m): 830 ***Max Elev. (m):*** 830 ***Best Source of Info:*** S43BRIACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S43BRIACONCA01 Brinkman, A.H. AC 7761 1943-06-18
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P16 12 415900 5736850 Craigmyle Lat/Long: 51 47'/ 112 13' 1 2298
Potentilla plattensis low cinquefoil SRank: S1

Psilocarphus elatior **woollyheads**

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers late May to early June
Specific Search Strategies (if any): detectable long past flowering into early July; very small ephemeral wetlands in sand plains

Element Occurrences:

Element Code: PDAST7R020 ***Occurrence Code #:*** 001 ***Survey Date:*** 1989-07-03
Last Observed: 1989-07-03 ***First Observed:*** 1989-07-03 ***Precision Code:*** S
Directions: Milk River Natural Area
General Description: Sandy ephemeral wetland on exundated soil
Min Elev. (m): 985 ***Max Elev. (m):*** 985 ***Best Source of Info:*** S89WALPPABCA16
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA16 Wallis, C. PP 772 1989-07-03
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 520873 5428534 Milk River Ecological Reserve LSD 13 13 24
Date Source Abstract Code Observer Occurrence Data
Several hundred plants, generally scarce in the area
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 002 ***Survey Date:*** 1990-08-22
Last Observed: 1990-08-22 ***First Observed:*** 1990-07-24 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Dinosaur Provincial Park, S end of.
General Description: Bank near slough edge; growing with grasses under willows (trees).
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S90ROMUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90ROMUCABCA01 Romuld, M. UC 49471 1990-08-23 Over 50 plants in population
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L11 12 465600 5620150 Dinosaur Provincial Park Site 27. 1 231
Source Code Author Publisher Year Title
U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta
Date Source Abstract Code Observer Occurrence Data
over 50 plants in population
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 003 ***Survey Date:*** 1989-07-14
Last Observed: 1989-07-14 ***First Observed:*** 1989-07-14 ***Precision Code:*** M
Directions: Bow City, about 10 km W of; Hwy. 539, off.
General Description: Undisturbed soil; Stipa comata grassland.
Min Elev. (m): 800 ***Max Elev. (m):*** 800
Other Comments: Det. by K. Tannas ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I08 12 404350 5586800 Bow City 1 1418
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 004 ***Survey Date:*** 1985-05-27
Last Observed: 1985-05-27 ***First Observed:*** 1979-07-04 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Onefour, 10 km S of.
General Description: dried-out slough with sandy bottom and dessicated slough bottom
Min Elev. (m): 900 ***Max Elev. (m):*** 900
Other Comments: EO mapped as multipolygon. ***Best Source of Info:*** S85WALUAABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA12 Wallis, C. UA 098412 1985-05-27 Y "Rare"; flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540425 5430425 Lost River SW 1-1-4 W4M 5 4
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 005 ***Survey Date:*** 1997-07-07
Last Observed: 1997-07-07 ***First Observed:*** 1997-07-07 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: S.Saskatchewan River, 7 km S of; Creek in Bullsprings Coulee,5.5 km W o f.
General Description: Carex ste, Agro smi, Vero per, Myos ari, Arte lud, Hor jub, Elep pal, Beck syz, Grind squ,Nav min, Bois glab. Depression which seasonally contains water . Flooding may result in mud flats with limited vegetation.
Min Elev. (m): 762 ***Max Elev. (m):*** 762
Other Comments: 9 Bois gla-immature(many more could emerge in spring), Psil cla- 200 on RoW, 38 North of existing pipeline and south of road, 20 on existing pipeline.
Management Comments: Hargrave Ranch. Proposed AEC pipeline also 9 Boisduvalia glabella noted.0 % loss: off Row, and pipeline will not be cons ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 536000 5582600 Bull Springs Coulee Lat 50 deg 23 min 78 sec, Long 110 deg 30 min 43 sec W - 15-33-16-4-W4M 18 3911
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Date Source Abstract Code Observer Occurrence Data
1997-07-29 U97AXY03ABCA Kathy Tannas 200 individuals noted; vegetative, juveniles
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: CFB Suffield; ~3km W of W border of; Outer Rainy Hill; SE of.
General Description: locally common, ephemeral wetlands
Min Elev. (m): 754 ***Max Elev. (m):*** 792
Other Comments: pipeline construction (U99BUS01ABCA) EO mapped as multipolygon.
Management Comments: km 245.7--size of loss not known, km 252.8 10-15% of wetland lost, km 255.5 30 m of wetland channel lost through (ctd.) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484750 5584000 Outer Rainy Hill LS# 38, Km 252.8,NW13- 5-17-9-4 and LS#39;
km:255.5; LLD: SW 32 16-9-4 and LS#37;km:245.7;LLD:SW 5-32-17-9-4 7 4022
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hwy 1; ~3km E of; Suffield airfield; ~km W of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 732 ***Max Elev. (m):*** 754
Other Comments: km 269.4--10% loss of wetland through pipeline construction (U99BUS01ABCA). EO mapped as multipolygon.
Management Comments: km 266.2--loss not estimated, km 266.8--30 m of drainage lost, km 285.2--0 loss (ctd.) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 484700 5568350 Suffield airfield Multipolygon; LS#41; km:267.4; LLD:NW 4-20 15-9-4; LS#40; km:266.2; LLD:NW 29 15-9-4; LS#40;km:266.8; LLD SW 4-29-15-9-4; LS#40; km: 269.4;LLD: SW 4-17 15-9-4; LS#41; km:273.9; LLD:SW 4-4-15-9-4; LS#43; km:285.2; LLD:NW 15-35 14-9-6 12 4035
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~8.75km SE of; S Saskatchewan River; ~8m N of.
General Description: locally common; ephemeral wetland
Min Elev. (m): 770 ***Max Elev. (m):*** 785
Other Comments: pipeline construction (U99BUS01ABCA). EO mapped as multipolygon.
Management Comments: km 284.6--20% of wetland, km 287.3--10% of wetland lost through (ctd.) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 490900 5554425 Suffield Multipolygon; LS#43; km:284.4 & 284.6;LLD:SW 6-2-14-9-4; LS#43; km:287.3; LLD:SW 15-36 13-9-4 13 4038
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 009 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Suffield; ~34.75km SEof; S Saskatchewan River; ~4.5km N of.
General Description: Locally common, ephemeral wetlands.
Min Elev. (m): 800 ***Max Elev. (m):*** 800
Management Comments: km 296.0--20% loss of wetland through pipeline construction (U99BUS01ABCA) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L03 12 497300 5544850 South Saskatchewan River LS#45; km: 296; LLD: NE 10-4-13-8-4 11 4026
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 010 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bridge over N side of Rattlesnake Lake; ~2 km E of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 808 ***Max Elev. (m):*** 808
Other Comments: EO mapped as multipolygon.
Management Comments: km 306.3--size of impact unknown, km 308.5 off ROW 0% loss through pipeline construction (U99BUS01ABCA) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 502600 5536750 Rattlesnake Lake Multipolygon; LS#46; km:306.3; LLD:NE 9-12-12-8-4; LS:46; km:308.5;LLD: NE 16-6-12-7-4. 19 4049
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 011 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Seven Persons; 9 km SE of; Fitzgerald; ~4.25km SE of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 792 ***Max Elev. (m):*** 792
Management Comments: estimated habitat loss through pipeline construction not provided in U99BUS01ABCA ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 515800 5522925 Fitzgerald LS#49; km: 326.1; LLD: SE 2-32-10-6-4.;SW 28 10-6-4 21 4052
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 012 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Manyberries; ~31.5 km NE of; Sage Creek; ~8.25 km N of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 1105 ***Max Elev. (m):*** 1105
Other Comments: polygon
Management Comments: km 372.1--size of loss unknown, km 372.3--50% of wetland lost through pipeline construction (U99BUS01ABCA) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 535698 5481606 Sage Creek LS#56; km:372.1,372.3; LLD:NE 20 6-4-4. 18 4053
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 013 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bain; ~6.5km NE of; Bare Creek; ~2.75km W of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 1074 ***Max Elev. (m):*** 1074
Other Comments: through pipeline construction (U99BUS01ABCA). Mapped as multipolygon.
Management Comments: km 392.6--20% loss of wetland, km 393.4--0% loss, km 394.6--20% loss of wetland, km 395--25% loss of wetland (ctd) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 546800 5463650 Bain Multipolygon; LS#59; km:395,394.6,393.4;LLD:SW & SE 28 4-3-4;NW 28 4-3-4, Legal Subdivision 2,6,13; LS:59; km:392.6; LLD:SE:8-32 4-3-4 22 4054
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 014 ***Survey Date:*** 1927-07-12
Last Observed: 1927-07-12 ***First Observed:*** 1927-07-12 ***Actual Mapping Precision (m):*** 1800 ***Precision Code:*** M
Directions: SE of Brooks; Kininvie.
General Description: depression in prairie
Min Elev. (m): 745 ***Max Elev. (m):*** 745
Other Comments: flowers ***Best Source of Info:*** S27MOSUAABCA12
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S27MOSUAABCA12 Moss, E.H. UA 18501 1927-07-12 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L06 12 466400 5580250 Kinvie 50 22/111 28 14 4442
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 015 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cressday; ~4.5km SW of; Hwy 48; ~4km W of.
General Description: locally common; ephemeral wetlands
Min Elev. (m): 953 ***Max Elev. (m):*** 968
Other Comments: EO mapped as multipolygon.
Management Comments: km 405--possibly 100% loss of wetland, km 407.9--30% loss of wetland (U99BUS01ABCA) ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 550675 5453900 Cressday Multipolygon; LS#61; km:405; LLD:SE 9-26 3-3-4; LS#61; km:407.9; LLD:NW 12-13-3-3-4 29 4056
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
U99BUS01ABCA Bush, D. Email to Joyce Gould dated Oct. 6, 1999 Psilocarphus elatior
Psilocarphus elatior woollyheads SRank: S2
++++++++++++++++++++++++

Element Code: PDAST7R020 ***Occurrence Code #:*** 016 ***Survey Date:*** 1979-07-04
Last Observed: 1979-07-04 ***First Observed:*** 1979-07-04 ***Actual Mapping Precision (m):*** 1100 ***Precision Code:*** M
Directions: Wild Horse, 19 km NW of; Onefour, 14 km NE of; Sage Creek.
General Description: mixed grassland - barren flats
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** E ***Best Source of Info:*** S79WALUAABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA10 Wallis, C. UA 84606 1979-07-04 Y remains of flowers; immature, mature fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551775 5446400 Sage Creek LS#62; km:412.8; LLD:NW 36 2-3-4 31 4060
Psilocarphus elatior woollyheads SRank: S2

Quercus macrocarpa **bur oak**

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Unknown
Phenology: tree species
Specific Search Strategies (if any):

Element Occurrences: none known but has been reported for Alberta

Ranunculus glaberrimus early buttercup

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Grassland
Phenology: flowers in May
Specific Search Strategies (if any): wide area searches in lush grassland, seeking out moister microhabitats and swales

Element Occurrences:

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1996-05-25
Last Observed: 1996-05-25 ***First Observed:*** 1953-05-30 ***Precision Code:*** S
Directions: Waterton Lakes National Park; Red Rock Canyon, on W side of;trail, along; middle bridge, ca. 20 m N of.
General Description: shallow soil over ledges, seasonal seepage
Min Elev. (m): 1525 ***Max Elev. (m):*** 1525
Slope: 10.00 ***Aspect:*** E ***Size of Occurrence:*** 1.00 ***Best Source of Info:*** PNDACH01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53MOSUAABCA33 Moss, E.H. UA 9044 1953-05-30 Y flowers, fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716900 5445950 Red Rock Canyon 130 562
Date Source Abstract Code Observer Occurrence Data
ca. 35 plants seen, flowering(PNDACH01ABCA)
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1971-05-01
Last Observed: 1971-05-01 ***First Observed:*** 1971-05-01 ***Precision Code:*** M
Directions: Bigstone, near; Blood Indian Reservoir, bank on
General Description: on moist, south sloping bank
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Best Source of Info:*** S71OWEUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71OWEUCABCA01 Owens, Rob UC 11365 1971-05-01 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M06 12 485250 5677600 Blood Indian Reservoir 2 258
Date Source Abstract Code Observer Occurrence Data
blooming
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1964-06-23
Last Observed: 1964-06-23 ***First Observed:*** 1964-06-23 ***Precision Code:*** M
Directions: Kananaskis Forest Preserve; Rasberry Ridge, on; firetower, near
General Description: open mountain meadow
Min Elev. (m): 2286 ***Max Elev. (m):*** 2286 ***Best Source of Info:*** S64DEVUCABCA24
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64DEVUCABCA24 de Vries, B. UC 11364 1964-06-23 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J07 11 668350 5574250 Cataract Creek 22 1545
Date Source Abstract Code Observer Occurrence Data
Uncommon apetalous form
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1970-05-08
Last Observed: 1970-05-08 ***First Observed:*** 1970-05-08 ***Precision Code:*** M
Directions: Little Fish Lake; Hand Hills
General Description: grazed fescue prairie
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S70OWEUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70OWEUCABCA01 Owen, Rob UC 11362 1970-05-08 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 408900 5693950 Little Fish Lake elevation changed from 2700 to 3000 feet; 15-28-17 W4 5 2289
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1965-08-24
Last Observed: 1965-08-24 ***First Observed:*** 1965-08-24 ***Precision Code:*** S
Directions: Banff National Park;Snow Creek Valley, Windy Warden's station, 1 1/2 mi. up Snow Creek from
General Description: SW-facing slope
Min Elev. (m): 2019 ***Max Elev. (m):*** 2019 ***Aspect:*** SW ***Best Source of Info:*** S65BEDUCABCA28
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S65BEDUCABCA28 Beder, Karen UC 11363 1965-06-24 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O12 11 586900 5711850 Snow Creek Valley 14 2219
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1974-06-09
Last Observed: 1974-06-09 ***First Observed:*** 1974-06-09 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Livingstone River and Dry Creek junction, 2.5 km N of; Hailstone Butte.
General Description: Moist, grassy meadow at edge of intermittent creek.
Min Elev. (m): 1981 ***Max Elev. (m):*** 1981 ***Best Source of Info:*** S74JOHUCABCA18
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74JOHUCABCA18 Johnson, Derek UC 11361 1974-06-09 Y blooming and fruiting
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J01 11 680400 5564200 Hailstone Butte 50 12/114 30 1 1428
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1979-05-22
Last Observed: 1979-05-22 ***First Observed:*** 1979-05-22 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Whiskey Gap;1.5km S of.
General Description: Mixed prairie grassland, Sommerfeldt Ranch.
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370 ***Best Source of Info:*** S79SCOACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79SCOACONCA01 Scotter, G.W. AC 267116 1979-05-22
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H03 12 352550 5431000 Whiskey gap 49-01'30";113-01' 37 4141
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1942-05-19
Last Observed: 1942-05-19 ***First Observed:*** 1942-05-19 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Waterton Lakes N.P.; Cameron Lake.
General Description: flat meadows along lake
Min Elev. (m): 1675 ***Max Elev. (m):*** 1675 ***Best Source of Info:*** S42MCCUAABCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S42MCCUAABCA36 McCalla, W.C. UA 71088 1942-05-19 Y flowers, fruits; "petals bright yello" [drying white]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 716300 5432950 Cameron Lake 99 543
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1970-06-23
Last Observed: 1970-06-23 ***First Observed:*** 1970-06-23 ***Actual Mapping Precision (m):*** 1400 ***Precision Code:*** M
Directions: Waterton Lakes N.P.; Bertha Lake, slopes just above of.
General Description: rocky ridge, alpine meadow
Min Elev. (m): 1981 ***Max Elev. (m):*** 1981 ***Best Source of Info:*** S70GADUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70GADUAABCA06 Gadd, M., Nagy, J. UA 37759 1970-06-23 Y ripe fruits; vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H04 12 284500 5434150 Bertha Lake 49 02/113 56 188 1119
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++

Element Code: PDRAN0L0Z0 **Occurrence Code #:** 011 **Survey Date:** 1970-06-04
Last Observed: 1970-06-04 **First Observed:** 1970-06-04 **Actual Mapping Precision (m):** 400 **Precision Code:** M
Directions: Waterton Lakes N.P.; Red Rock Canyon, 3.5 km NW of; Snowshoe Fire Road, on.
General Description: alpine meadow
Min Elev. (m): 1524 **Max Elev. (m):** 1524 **Best Source of Info:** S70NAGUAABCA14
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70NAGUAABCA14 Nagy, J., Gadd, M. UA 37757 1970-06-04 Y flowers, immature fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 714000 5448000 Snowshoe Fire Road 49 08/114 03 179 591
Ranunculus glaberrimus early buttercup SRank: S2
+++++++++++++++++++++++

Element Code: PDRAN0L0Z0 **Occurrence Code #:** 012 **Survey Date:** 1999-05-29
Last Observed: 1999-05-29 **First Observed:** 1971-05-09 **Actual Mapping Precision (m):** 25 **Precision Code:** S
Directions: Reesor Lake, 2 km W of; Reesor Lake Viewpoint.
General Description: moss-herbaceous community on thin soil over cobble on upper slope; with Claytonia, Achillea millefolium, Juncus spp., Loma
cous, Rosa aci; mesic, subhygric-hygric
Min Elev. (m): 1370 **Max Elev. (m):** 1400
Other Comments: Various aspects; slope from 5 to 30% - see EO Data table.
Management Comments: inarea grazed and browsed short by cattle or wildlife; species may need lack of competition **Best Source of Info:** S71MCPUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71MCPUAABCA08 McPherson, G. UA 37643 1971-05-09 Y flowers; yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 561672 5502282 Reesor Lake Viewpoint 43 139
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-20 U99BRA01ABCA Cherly Bradley 1) 2 plants in a ca 50 m2 of sutable habitat - Popu tre/Poa pratensis-Tara off herbaceous community on thin soil over cobbles in a moist seepage area at bottom of small velley - V6 vegetative, R7 reproductive; 2) 110+ plants in ca 400 m2, may be twice more that not yet in bloom - Poa pra-Phele pra-herb/ moss community below small hanging valley, thin soil over cobbles, seepage from snow melt, V4 vegetative, R5 (?); 3) Prun vir (stunted and browsed)/Poa pra sparse scrubland on thin soil with exposed cobbles. For all aspect SE, NW, slope 5%, 30%, moisture subhygric-hygric 1999-05-29 U99BRA01ABCA Cherly Bradley Main dot - 2 plants; V7 vegetative, R8 reproductive - Prun vir (<1m)/Junc com-Fest ide(?)/moss herbaceous community on thin soil over cobbles on upper slope; also with Saxi occ, Cyst fra, Dode con, Disp tra, Loma cou, aspect NW, slope 25%, moisture mesic
Ranunculus glaberrimus early buttercup SRank: S2
+++++++++++++++++++++++

Element Code: PDRAN0L0Z0 **Occurrence Code #:** 013 **Survey Date:** 1999-05-19
Last Observed: 1999-05-19 **First Observed:** 1971-05-10 **Actual Mapping Precision (m):** 25 **Precision Code:** S
Directions: Graburn Creek, 3 km upstream from mouth of.
General Description: small meadow with cow-docked shrubs and small forested meadow; mesic - subhygric
Min Elev. (m): 1210 **Max Elev. (m):** 1235
Management Comments: hevily grazed **Best Source of Info:** S71SCOUAABCA35
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71SCOUAABCA35 Scott, P.J. UA 37726 1971-05-10 Y flowers; flowers yellow
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 568972 5498783 Graburn Creek 50 4491
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-19 U99BRA01ABCA Reg Ernst UTM569 850/5499200 NAD27; >100 plants in 200 m2, V6 vegetative, R5 reproductive - small forested meadow, with Crategus rotundifolia, Taraxacum, Potentilla sp., Poa pratensis, Rosa, Thalictrum sp.; mesic-subhygric; aspect E, slope <10%
Ranunculus glaberrimus early buttercup SRank: S2
+++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1999-05-25
Last Observed: 1999-05-25 ***First Observed:*** 1999-05-20 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Graburn Creek, upper part of and headwaters of.
General Description: grass/shrub meadows, cobbled ravine bottom and forested meadow; for more detailed information see EO data table
Min Elev. (m): 1335 ***Max Elev. (m):*** 1400
Other Comments: Detailed information about aspect, slope and moisture in EO data table.
Management Comments: heavily grazed ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 565475 5496325 Graburn Creek 4-8-1 W4M 104 5556
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-20 U99BRA01ABCA Reg Ernst Main dot (104) - ~100 plants in 300 m2, V6 vegetative, R6 reproductive -grassland/shrub meadow along creek, with Poa pratensis, Phleum pratense, Symphoricarpos, Rosa, Taraxacum, aspect E, slope <10%, moisture mesic-subhygric, heavily grazed; 1) >1000 plants in >1000 m2, V6 vegetative, R7 reproductive - cobbled ravine bottom in a forest/grassland transition, with Poa pratensis, moss, Phleum pratense, Rosa, Claytonia, Lomatium cous/Taraxacum, Potentilla spp., Trifolium sp, Festuca, aspect NE, slope <20%, moisture mesic-subhygric, only location when is found it growing in fescue, mainly found on heavily grazed Poa pratensis sites; dot # 74 - ~100 plants in 1000 m2, V6 vegetative, R6 reproductive - forest meadow on E facing slope, underlaying cobbles (stones), with Poa pratensis, moss, Carex sp., Agropyron sp., Taraxacum/Fragaria, Achillea millefolium, Aspen overstory (Lomatium cous), aspect E, slope <20%, moisture mesic 1999-05-25 U99BRA01ABCA Reg Ernst 2) >1000 plants in >10000 m2, V6 vegetative, R7 reproductive - moist meadows along creek, various plant communities, mainly Poa pratensis, Claytonia, Lomatium cous, aspect various, slope <20% misture sub hygric-hygric
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1999-05-20
Last Observed: 1999-05-20 ***First Observed:*** 1999-05-20 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Graburn Creek, mouth of, 3.5 km SW of, south tributary of.
General Description: NE facing slopes in forested meadows, with Phleum pratense, Poa pratensis, Taraxacum/Bromus inermis; mesic-sub hygric
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370
Slope: 20.00 ***Aspect:*** NE
Other Comments: Slope less than 20%.
Management Comments: heavily grazed ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 568750 5497550 Graburn Creek 11-8-1 W4M 76 5525
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-20 U99BRA01ABCA Reg Ernst <50 plants in <100 m2; V6 vegetative; R7 reproductive
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1999-05-20
Last Observed: 1999-05-20 ***First Observed:*** 1999-05-20 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; "Storm Creek", 1.5 km S of; Saskatchewan boundary, just W of.
General Description: north flowing ravine in fescue grassland/underlying cobbles, wit Poa pratensis, Taraxacum, Potentilla spp, Lomatium cous; mesic
Min Elev. (m): 1370 ***Max Elev. (m):*** 1370
Slope: 10.00 ***Aspect:*** N ***Size of Occurrence:*** 0.01
Other Comments: Slope less than 10%.
Management Comments: heavily grazed ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 571600 5495150 "Storm Creek" NE36-7-1 W4M 115 5599
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-20 U99BRA01ABCA Reg Ernst ~100 plants in >500 m2
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1999-05-20
Last Observed: 1999-05-20 ***First Observed:*** 1999-05-20 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; "Storm Creek", 0.7 km S of; Saskatchewan boundary, 2.5 km W of.
General Description: north flowing ravine in grassland, with Festuca, Potentilla spp., Taraxacum, Claytonia; mesic
Min Elev. (m): 1385 ***Max Elev. (m):*** 1385
Slope: 10.00 ***Aspect:*** NE ***Size of Occurrence:*** 0.01
Other Comments: Slope less than 10%. ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 569500 5495325 "Storm Creek" N35-7-1 W4M 116 5600
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-20 U99BRA01ABCA Reg Ernst >500 plants in <500 m2; V6 vegetative; R7 reproductive
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1999-05-24
Last Observed: 1999-05-24 ***First Observed:*** 1999-05-24 ***Actual Mapping Precision (m):*** 25 ***Precision Code:*** S
Directions: Cypress Hills P.P.; Nine Mile Creek, headwaters of.
General Description: south flowing grassland ravine, stoney drainage; with Poa paratensis, Taraxacum, Fragaria sp., Achillea millefolium,
Dodecatheum; hygric
Min Elev. (m): 1350 ***Max Elev. (m):*** 1350
Slope: 20.00 ***Size of Occurrence:*** 0.01
Other Comments: Slope less than 20%.
Management Comments: heavily grazed site ***Best Source of Info:*** U99BRA01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 569525 5493950 Nine Mile Creek 73 5522
Source Code Author Publisher Year Title
U99BRA01ABCA Bradley, C., R. Ernst, D. Dickinson & L. Fitch 1999 Rare Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1999-05-24 U99BRA01ABCA Reg Ernst >1000 plants in >1000 m2; V6 vegetative; R7 reproductive
Ranunculus glaberrimus early buttercup SRank: S2
++++++++++++++++++++++++

Element Code: PDRAN0L0Z0 ***Occurrence Code #:*** 019 ***Survey Date:*** 2000-00-00
Last Observed: 2000-00-00 ***First Observed:*** 2000-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: McLean Hill, 4.5 km W of; Silvester Creek, mouth of, 1.5 km NNE of
General Description: in open aspen-grassland in McLean Creek OHV area
Min Elev. (m): 1447 ***Max Elev. (m):*** 1447
Other Comments: one specimen found, abundant Botrychium (all lunaria) in this area; no specimen taken ***Best Source of Info:*** UOOWAL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J15 11 661592 5637834 McLean Creek 10
Source Code Author Publisher Year Title
U00WAL02ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, McLean Creek, Well Pad/Access Road Assessment
Ranunculus glaberrimus early buttercup SRank: S2

Rorippa curvipes var truncata blunt-leaved yellow cress

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers June to August
Specific Search Strategies (if any): small ephemeral wetlands in sand plains; later surveys are preferable since fruits for conclusive identification are ripe

Element Occurrences:

Element Code: PDBRA270R0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1976-00-00
Last Observed: 1976-00-00 ***First Observed:*** 1976-00-00 ***Precision Code:*** G
Directions: Cranford, 16 km W of
General Description: dried up slough
Min Elev. (m): 830 ***Max Elev. (m):*** 830
Other Comments: 49 31N/112 00W ***Best Source of Info:*** S76KLAUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA01 Klar, A.K. UA 80718 1976-00-00 [flowers; fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H16 12 401000 5516000 Cranford 3 1408
Rorippa curvipes var truncata blunt-leaved yellow cress SRank: S1
++++++++++++++++++++++

Element Code: PDBRA270R0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1998-06-11
Last Observed: 1998-06-11 ***First Observed:*** 1998-06-11 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Ross Lake, ~5 km SE of; North Milk River, ~2.5 km N of.
General Description: depression area where extra moisture collects during runoff; moisture high; Juncus sp.. Alopecurus aequalis, Potentilla anserina
Min Elev. (m): 1285 ***Max Elev. (m):*** 1285
Slope: 0.00 ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 364400 5442100 Ross Lake 15-2-22 W4M 33 5046
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey ***Date Source Abstract Code Observer Occurrence Data***
1998-06-11 U98ERN01ABCA Reg Ernst estimated >3000 plants; 80% vegetative, 20% flowering
Rorippa curvipes var truncata blunt-leaved yellow cress SRank: S1
++++++++++++++++++++++

Element Code: PDBRA270R0 ***Occurrence Code #:*** 003 ***Survey Date:*** 2000-09-14
Last Observed: 2000-09-14 ***First Observed:*** 2000-09-14 ***Actual Mapping Precision (m):*** 150 ***Precision Code:*** S
Directions: Calgary; Fairview area, E of ; Bow River, W side of; Cominco Lands
General Description: shallow water/exposed shore occurs in the north-central portion of the property W of Deerfoot Trail at the western end of the canal
Min Elev. (m): 1010 ***Max Elev. (m):*** 1020
Other Comments: 50 plants NAD27 707915E 5651927N; specimen collected; plants appear to be localized here due to the gravelly-silt substrate and the relatively gentle slope compared to the other parts of the canal ***Best Source of Info:*** U00WAL04ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 707915 5651927 Calgary 23 6305
Source Code Author Publisher Year Title
U00WAL04ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Rare Plant Survey, Cominco Lands, Calgary
Rorippa curvipes var truncata blunt-leaved yellow cress SRank: S1

Rorippa sinuata spreading yellow cress

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers June
Specific Search Strategies (if any): small ephemeral wetlands in sand plains

Element Occurrences:

Element Code: PDBRA270K0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1974-06-06
Last Observed: 1974-06-06 ***First Observed:*** 1974-06-06 ***Precision Code:*** M
Directions: Lethbridge Res. Station
General Description: roadside
Min Elev. (m): 930 ***Max Elev. (m):*** 930
Other Comments: 4 specimens ***Best Source of Info:*** S74BOHALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S74BOHALABCA01 Bohus, G. AL 3104 1974-06-06 Y blooming, fruiting
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 359575 5508375 Lethbridge Research Station 11 1362
Rorippa sinuata spreading yellow cress SRank: S1
+++++++++++++++++++++++

Element Code: PDBRA270K0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1964-07-06
Last Observed: 1964-07-06 ***First Observed:*** 1964-07-06 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Oldman River, 11.5 km SE of; St. Mary River, 10 km E of; Hwy 5, 0.5 km E of.
General Description: Numerous plants in wet depression near west edge of quarter section.
Min Elev. (m): 930 ***Max Elev. (m):*** 930 ***Best Source of Info:*** S64ALEACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64ALEACONCA02 Alex, J.F. & J.P. Gebhardt AC 397785 1964-07-06 stems decumbent to ascending; flowers yellow; numerous plants
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 372000 5496400 Highway 5 NW 34-7-21-W4 26 4133
Rorippa sinuata spreading yellow cress SRank: S1
+++++++++++++++++++++++

Element Code: PDBRA270K0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1952-06-06
Last Observed: 1952-06-06 ***First Observed:*** 1952-06-06 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Nobelford, 4 km WSW of.
General Description: edge of road
Min Elev. (m): 990 ***Max Elev. (m):*** 990 ***Best Source of Info:*** S52MCCUAABCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52MCCUAABCA10 McCalla, W.C., Moss, E.H. UA 91226 1952-06-06 Y flowers, developing fruits; from a mat 2 yards long and 0.5 yd wide. petals bright yellow S52MOSUAABCA32 Moss, E.H. UA 9886 1952-06-06 Y flowers, developing fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 348650 5526400 Nobelford 5 4466
Rorippa sinuata spreading yellow cress SRank: S1

Rorippa tenerrima slender cress

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Sandy
Phenology: flowers July to August
Specific Search Strategies (if any): small ephemeral wetlands in sand plains as well as seasonal stream channels in sandy habitat; may flower in early June depending on conditions; later surveys are preferable when fruits for conclusive identification are ripe

Element Occurrences:

Element Code: PDBRA270P0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1969-08-07
Last Observed: 1969-08-07 ***First Observed:*** 1969-08-07 ***Precision Code:*** M
Directions: Gravenstafel Lake, terminal moraine
General Description: alpine meadow
Min Elev. (m): 2010 ***Max Elev. (m):*** 2010
Other Comments: Det Job Kuijt 1971. Rorippa obtusa ***Best Source of Info:*** S69GADULABCA11
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69GADULABCA11 Gadd, M. UL none 1969-08-07
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G08 11 685700 5463000 Mount Haig 95 739
Rorippa tenerrima slender cress SRank: S1
++++++++++++++++++++++

Element Code: PDBRA270P0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1986-07-07
Last Observed: 1986-07-07 ***First Observed:*** 1986-07-07 ***Precision Code:*** M
General Description: in ephemeral pond in rough fescue grassland on ridgetop.
Min Elev. (m): 1250 ***Max Elev. (m):*** 1250 ***Best Source of Info:*** B86WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 457574 5427683 Sweetgrass Hills Lat/Long: 49 00'/ 111 35' 2 50
Source Code Author Publisher Year Title
B86WAL01ABCA Wallis, Clifford et al Alberta Forestry Lands & Wildlife 203p 1986 Pilot rare plant monitoring program in the Oldman Regional Plan area of southwestern Alberta
Date Source Abstract Code Observer Occurrence Data
3 plants.
Rorippa tenerrima slender cress SRank: S1
++++++++++++++++++++++

Element Code: PDBRA270P0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1989-08-15
Last Observed: 1989-08-15 ***First Observed:*** 1989-08-15 ***Precision Code:*** S
General Description: Dessicated stream channel on exnudated soil.
Min Elev. (m): 990 ***Max Elev. (m):*** 990 ***Best Source of Info:*** S89WALPPABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89WALPPABCA04 Wallis, C. PP 675 1989-08-15 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 518873 5430984 Milk River Natural Area LSD 8 10 21
Date Source Abstract Code Observer Occurrence Data
9 plants; intolerant of grazing.
Rorippa tenerrima slender cress SRank: S1
++++++++++++++++++++++

Element Code: PDBRA270P0 ***Occurrence Code #:*** 005 ***Survey Date:*** 2000-08-23
Last Observed: 2000-08-23 ***First Observed:*** 2000-08-23 ***Actual Mapping Precision (m):*** 200 ***Precision Code:*** S
Directions: Altario, 6 km SE of
General Description: ephemeral wetland
Min Elev. (m): 716 ***Max Elev. (m):*** 724
Other Comments: 12 slender cress (R. tenerrima) at 563446E, 5750227N, Area C; 25 slender cress (R. tenerrima) at 563264E, 5750029N, Area B ***Best Source of Info:*** U00WAL03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 563324 5750054 Altario 1-9-34-1-W4M 6 6302
Source Code Author Publisher Year Title
U00WAL03ABCA Wallis, C. Cottonwood Consultants Ltd., Calgary 2000 Natural Features Assessment, Proposed Well and Access Route Penn West Petroleum. 1-9-34-1-W4M
Rorippa tenerrima slender cress SRank: S1

Ruppia cirrhosa widgeon-grass

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass
Habitat: Wetland-Alkali
Phenology: detectable in July
Specific Search Strategies (if any): may require specialized equipment and boats to access areas where this species occurs

Element Occurrences:

Element Code: PMRUP01020 ***Occurrence Code #:*** 001 ***Survey Date:*** 1975-07-14
Last Observed: 1975-07-14 ***First Observed:*** 1975-07-14 Precision ***Code:*** M
Directions: Ministik Lake, SE basin, N shore; among island channels
General Description: In shallow water (0.5 - 1.5m) of highly eutrophic lake
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Slope:*** 0.00
Other Comments: Mapped in Moss & Packer (1983) and Packer & Bradley (1984) ***Best Source of Info:*** S75POTUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75POTUAABCA01 Potter, D.S. UA 86124 1975-07-14
S75POTUAABCA02 Potter, D.S. UA 86126 1975-07-14
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H06 12 365050 5911650 Ministik Lake Bird Sanctuary 53 20/113 00 8 3210
Date Source Abstract Code Observer Occurrence Data
Buds, flowers & fruit; some plants uprooted by ducks
Ruppia cirrhosa widgeon-grass SRank: S2
++++++++++++++++++++++

Element Code: PMRUP01020 ***Occurrence Code #:*** 002 ***Survey Date:*** 1951-00-00
Last Observed: 1951-00-00 ***First Observed:*** 1951-00-00 Precision ***Code:*** M
Directions: Miquelon Lake No. 3
General Description: In 1 m of water, electrical conductivity of water 6200 umhos/cm.
Min Elev. (m): 768 ***Max Elev. (m):*** 768 ***Slope:*** 0.00 ***Best Source of Info:*** SNDHUSUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
SNDHUSUAABCA01 Husband, B. UA 98088 0000-00-00 [Emerging flowers, fruits]
SNDHUSUAABCA02 Husband, B. UA 98089 0000-00-00 [Buds, flowers]
SNDHUSUAABCA03 Husband, B. UA 98090 0000-00-00 [Buds, flowers, fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H02 12 378350 5896650 Miquelon Lake # 3 2 3184
Ruppia cirrhosa widgeon-grass SRank: S2
++++++++++++++++++++++

Element Code: PMRUP01020 ***Occurrence Code #:*** 003 ***Survey Date:*** 1975-07-07
Last Observed: 1975-07-07 ***First Observed:*** 1975-07-07 Precision ***Code:*** M
Directions: Oliver Lake, NW shore; sheltered bay
General Description: In 1.0-1.25 m water
Min Elev. (m): 762 ***Max Elev. (m):*** 762 ***Slope:*** 0.00
Management Comments: Provincial Crown owns lake (but not entire adjacent upland) ***Best Source of Info:*** S75POTUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S75POTUAABCA03 Potter, D.S. UA 86125 1975-07-07 [Buds, emerging flowers, small fruits]
S75POTUAABCA04 Potter, D.S. UA 86127 1975-07-07 [Buds, small fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H06 12 365350 5907750 Oliver Lake 53 18/113 00 9 3211
Source Code Author Publisher Year Title
B83MOS01ABCA Moss, E.H. and J.G. Packer University of Toronto Press 1983 Flora of Alberta Second Edition
B84PAC01ABCA Packer, J.G. and C.E. Bradley Provincial Museum of Alberta 1984 A checklist of the rare vascular plants of Alberta with maps.
Ruppia cirrhosa widgeon-grass SRank: S2
++++++++++++++++++++++

Element Code: PMRUP01020 ***Occurrence Code #:*** 004 ***Survey Date:*** 1979-07-26
Last Observed: 1979-07-26 ***First Observed:*** 1979-07-26 Precision ***Code:*** M
Directions: Tyrell Lake, eastern and western half of
General Description: Rooted in sand at 2.5-3.0 m & occasionally at shallower depths
Min Elev. (m): 970 ***Max Elev. (m):*** 970 ***Best Source of Info:*** S79RWHUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79RWHUAABCA01 RWH UA 81596 1979-07-26 Common; vegetative; immature flower buds
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H08 12 407000 5472000 Tyrrell Lake 2 1348
Ruppia cirrhosa widgeon-grass SRank: S2
+++++++++++++++++++++++

Element Code: PMRUP01020 ***Occurrence Code #:*** 007 ***Survey Date:*** 1991-05-05
Last Observed: 1991-05-05 ***First Observed:*** 1991-05-05 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: McIntyre Ranch; Ross Lake, near shore of
General Description: growing profusely in shallow water
Min Elev. (m): 1310 ***Max Elev. (m):*** 1310
Other Comments: duplicates; access #B91.3.1b and B91,3.2 ***Best Source of Info:*** S91STEPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91STEPMABCA01 Steinhilber, M. PM B91.3.1a 1991-05-05 Y
S91STEPMABCA02 Steinhilber, M. PM B91.3.1b 1991-05-05
S91STEPMABCA03 Steinhilber, M. PM B91.3.2 1991-05-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 360000 5445000 Ross Lake 49 09N/112 54.5W 12 930
Ruppia cirrhosa widgeon-grass SRank: S2

Sagina decumbens

Natural Region: Northern Fescue Grassland
Habitat: Unknown
Phenology: unknown but probably May or June
Specific Search Strategies (if any): likely in sandy shores of lakes

Element Occurrences: no EOs in ANHIC database but Moss shows a dot in the Little Fish Lake area

Shinnersoseris (Lygodesmia) rostrata annual skeletonweed

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in July
Specific Search Strategies (if any): search edges of active dunes; prefers coarser sand

Element Occurrences:

Element Code: PDAST8J010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1992-07-29
Last Observed: 1992-07-29 ***First Observed:*** 1992-07-29 ***Precision Code:*** M
Directions: Wainwright Dune Ecological Reserve. ***General Description:*** Well drained sand dune.
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S92JOHCFABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92JOHCFABCA04 Johnson, J.D. CF 930282 1992-07-29 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 526400 5827450 David Lake 4 271
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 002 ***Survey Date:*** 1985-09-00
Last Observed: 1985-09-00 ***First Observed:*** 1985-08-28 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: USA border, 8 km N of; Lost River Valley, E slope of.
General Description: on partially stabilized dunas
Min Elev. (m): 861 ***Max Elev. (m):*** 899
Other Comments: Slide #F929.086 ***Best Source of Info:*** S85WALUAABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA07 Wallis, C. UA 098410 1985-08-28 Y remains of flowers, ripe fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
I85WER04ABCA Wershler, C. 1985
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Date Source Abstract Code Observer Occurrence Data
Rare
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-08-26
Last Observed: 1995-08-26 ***First Observed:*** 1995-08-26 ***Precision Code:*** S
Directions: Alberta; Elkwater, ca. 18 km SW of; Cypress Hills plateau, W slope of; Manyberries Coulee, S side of.
General Description: Xeric alkaline sandy clay loam of coulee slope base colluvial fan, with barrens meadow of Poa secunda - Poa arida - Phlox hoodii- Sedum lanceolatum - Opuntia fragilis - Koeleria..
Min Elev. (m): 1116 ***Max Elev. (m):*** 1116 ***Size of Occurrence:*** ***Best Source of Info:*** S95MACUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACUCABCA01 Macdonald, I.D. UC none 1995-08-26
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E09 12 540474 5486081 Manyberries Creek Site 38; 49 31/110 26; LSD 7 22 118
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1995-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1988-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; the Middle Sands Hills
Min Elev. (m): 700 ***Max Elev. (m):*** 700
Other Comments: not recorded during the present survey - location from Wallis and Wershler (1988)
Management Comments: threatened from encroachment of vegetation onto active dune blowouts and dune slacks ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 544800 5606700 Middle Sand Hills UTM WM 544800 / 5606700 6 220
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA, 10 plants; annual plant
Shinnersoseris rostrata annual skeletonweed SRank: S2

Element Code: PDAST8J010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1995-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1988-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; the Middle Sands Hills
Min Elev. (m): 678 ***Max Elev. (m):*** 678
Other Comments: not recorded during the present survey - location from Wallis and Wershler (1988) ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 544500 5605100 Middle Sand Hills UTM WM 544500 / 5605100 7 221
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA, low hundreds
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 006 ***Survey Date:*** 1995-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1988-00-00 ***Precision Code:*** M
Directions: Canadian Forces Base Suffield National Wildlife Area; Whitco Trail, along
Min Elev. (m): 693 ***Max Elev. (m):*** 693
Other Comments: not recorded during the present survey - location from Wallis and Wershler (1988) ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 540100 5603800 Middle Sand Hills UTM WM ca 540100 / 5603800 8 222
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA, odd plant
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 007 ***Survey Date:*** 1995-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1988-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; Van Will Coral area, east of
General Description: Its habitat is open W- or S-facing active sand slopes & dune slack gravels, occasionally on N or E exposures & in recently stabilized areas with considerable loose sand.
Min Elev. (m): 693 ***Max Elev. (m):*** 693
Other Comments: not recorded during the present survey - location from Wallis and Wershler (1988) ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 524300 5575100 Cottonwood Grove UTM WL 524300 / 5575100 15 200
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA; rare in Canada; 4 plants
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 008 ***Survey Date:*** 1995-00-00
Last Observed: 1988-00-00 ***First Observed:*** 1988-00-00 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; Van Will Coral area, east of
General Description: Its habitat is open W- or S-facing active sand slopes & dune slack gravels, occasionally on N or E exposures & in recently stabilized areas with considerable loose sand.
Min Elev. (m): 693 ***Max Elev. (m):*** 693
Other Comments: not recorded during the present survey - information Wallis and Wershler (1988) ***Best Source of Info:*** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L07 12 522800 5574100 Cottonwood Grove UTM WL 522800 / 5574100 16 201
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
scarce in SNWA; rare in Canada; 200 plants
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 010 ***Survey Date:*** 1976-07-22
Last Observed: 1976-07-22 ***First Observed:*** 1976-07-22 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Orion, 6.5 km S of.
General Description: sand dunes
Min Elev. (m): 891 ***Max Elev. (m):*** 891 ***Best Source of Info:*** S76KLAUAABCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA13 Klar, Andrew UA 80562 1976-07-22 Y dev. fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 514073 5471133 Orion 8 88
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 011 ***Survey Date:*** 1976-07-08
Last Observed: 1976-07-08 ***First Observed:*** 1976-07-08 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Dillberry Lake Provincial Park.
General Description: sand dunes
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** S76KLAUAABCA15
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76KLAUAABCA15 Klar, Andrew UA 79961 1976-07-08 Y flowers; appears to have galls
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D09 12 566900 5826100 Dillberry Lake Provincial Park 52 35/110 01 3 264
Shinnersoseris rostrata annual skeletonweed SRank: S2
++++++++++++++++++++++++

Element Code: PDAST8J010 ***Occurrence Code #:*** 012 ***Survey Date:*** 1993-08-00
Last Observed: 1993-08-00 ***First Observed:*** 1993-08-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Hardisty, 2 km SW of.
General Description: disturbed site on well-drained loose sand; associated with Sporobolus cryptandrus, Calamovilfa longifolia, Heterotheca villosa
Min Elev. (m): 648 ***Max Elev. (m):*** 648
Other Comments: Specimen has been collected by Cheryl Bradley. ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D11 12 477575 5834400 Hardisty NE35-42-10 W4M 5 5073
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Date Source Abstract Code Observer Occurrence Data
1993-08-00 U99WIL02ABCA Cheryl Bradley two to five plants, healthy and fruiting
Shinnersoseris rostrata annual skeletonweed SRank: S2

Sisyrinchium septentrionale pale blue-eyed grass

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Meadow
Phenology: flowers in May and early June
Specific Search Strategies (if any): detectable later in the year, at least into early August; wide area searches in moist meadows, searching for microfeatures such as seepage, swales

Element Occurrences:

Element Code: PMIRI0D180 ***Occurrence Code #:*** 001 ***Survey Date:*** 1954-07-10
Last Observed: 1954-07-10 ***First Observed:*** 1953-07-17 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Conrich
General Description: moist meadow
Min Elev. (m): 1060 ***Max Elev. (m):*** 1060 ***Best Source of Info:*** S53SEXALABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S53SEXALABCA03 Sexsmith, J.J. AL 3966 1953-07-17 Y fruiting
S53SEXUAABCA03 Sexsmith, J.J. UA 5215 1953-07-17 Y fruits
S54MCCUAABCA03 McCalla, W.C. UA 49249 1954-07-10 Y well-dev. fruits; "the few flowers seen were white or almost so"
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P04 12 300000 5664000 Conrich 2 2277
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 002 ***Survey Date:*** 1966-03-22
Last Observed: 1966-03-22 ***First Observed:*** 1966-03-22 ***Precision Code:*** M
Directions: Fort Macleod, 5 miles NW of
General Description: moist prairie
Min Elev. (m): 945 ***Max Elev. (m):*** 945
Other Comments: verified by Kathleen Wilkinson 97/3/12 ***Best Source of Info:*** S66ALLALABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S66ALLALABCA04 Allen, T. D. and R. G. Gschaid AL 1996 1966-06-22 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H14 12 336000 5515000 Pearce 6 1395
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 003 ***Survey Date:*** 1925-07-05
Last Observed: 1925-07-05 ***First Observed:*** 1901-07-06 ***Precision Code:*** M
Directions: Banff National Park, Tunnel Mountain flats
Min Elev. (m): 1372 ***Max Elev. (m):*** 1372 ***Best Source of Info:*** S01SANUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S01SANPMABCA01 Sanson, N.B. PM 1901-07-06 Y
S01SANUCABCA03 Sanson, N. UC none 1901-07-06 Y blooming
S25MALNMONCA80 Malte, M.O. & W. R. Watson NM 14999 1925-07-05
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O04 11 602100 5671200 Banff Townsite 148 2049
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 004 ***Survey Date:*** 1976-05-27
Last Observed: 1976-05-27 ***First Observed:*** 1976-05-27 ***Precision Code:*** M
Directions: south of Alberta Bow River Bridge, east side of Bow River
Min Elev. (m): 1006 ***Max Elev. (m):*** 1021
Other Comments: ID'd as S. sarmentosum Suksd. (=S. septentrionale); verified by KW Jan. 31/97 ***Best Source of Info:*** S76JOHUCABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S76JOHUCABCA05 Johnson, J.D. UC 06915 1976-05-27 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I13 12 289725 5641000 Bow River ca 50 53/113 59 4 1425
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 005 ***Survey Date:*** 1977-05-23

Last Observed: 1977-05-23 ***First Observed:*** 1975-06-22 ***Precision Code:*** M

Directions: NW Calgary, Montgomery Flats, close to Bow River

Min Elev. (m): 1067 ***Max Elev. (m):*** 1067 ***Best Source of Info:*** S77ALLUCABCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S75HALUCABCA01 Hallworth, B.M. UC 06917 1975-06-22 Y blooming

S77ALLUCABCA01 Allen, D. UC 06918 1977-05-23 Y blooming

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82O01 11 698300 5661200 Calgary - Montgomery 27 1876

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 006 ***Survey Date:*** 1972-08-04

Last Observed: 1972-08-04 ***First Observed:*** 1972-08-04 ***Precision Code:*** M

Directions: Calgary, Glenmore Natural Area

General Description: moist soil

Min Elev. (m): 1082 ***Max Elev. (m):*** 1082 ***Best Source of Info:*** S72DANUCABCA02

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S72DANUCABCA02 Danielson, B. UC 06916 1972-08-04 Y blooming

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82J16 11 700000 5652325 Calgary - Glenmore Park 51 03/114 05 [disagree with site description and twp information vdd] 17 1711

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 007 ***Survey Date:*** 1981-06-18

Last Observed: 1981-06-18 ***First Observed:*** 1981-06-18 ***Precision Code:*** M

Directions: Calgary, University Heights and Shaganappi Trail, between

General Description: disturbed prairie; elev. 3600'

Min Elev. (m): 1097 ***Max Elev. (m):*** 1097 ***Best Source of Info:*** S81MACUCABCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S81MACUCABCA01 Macdonald, S. Ellen UC 37488 1981-06-18 Y blooming

S81STEUCABCA01 Stewart, Elaine UC 37684 1981-06-18 Y blooming

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82O01 11 700000 5662000 Calgary - University Heights 28 1877

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 008 ***Survey Date:*** 1980-07-05

Last Observed: 1980-07-05 ***First Observed:*** 1980-07-05 ***Precision Code:*** M

Directions: Calgary, Nosehill

General Description: open grassland, prairie habitat

Min Elev. (m): 1226 ***Max Elev. (m):*** 1226 ***Best Source of Info:*** S80CHIUCABCA03

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S80CHIUCABCA03 Chinnappa, C.C. & B.G. Warner UC 44845 1980-07-05 Y blooming

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82O01 11 702000 5666675 Calgary - Nosehill 29 1878

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 009 ***Survey Date:*** 1977-07-01

Last Observed: 1977-07-01 ***First Observed:*** 1977-07-01 ***Actual Mapping Precision (m):*** 1800 ***Precision Code:*** M

Directions: Kirriemuir, 5 km N of.

Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Best Source of Info:*** S77COLPMABCA02

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail

S77COLPMABCA02 Cole, J. PM B78.6.32 1977-07-01 Y depauperate specimen

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72M16 12 548000 5757300 Kirriemuir 51 58/110 18 1 260

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 010 ***Survey Date:*** 1972-07-27
Last Observed: 1972-07-27 ***First Observed:*** 1972-07-27 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M
Directions: Kleskun Hill NA.
General Description: open area, low on NE-facing slope
Min Elev. (m): 732 ***Max Elev. (m):*** 732 ***Aspect:*** NE ***Best Source of Info:*** S72HRAPMABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72HRAPMABCA07 Hrapko, J.O. & R. J. Maltais PM B72.23.51 1972-07-27 Y fruits, one white flower; narrow leaves
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83M07 11 404400 6124650 Kleskun Hill NA 55 16/118 30; SW 1/4 26-72-4 W6M 2 3582
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 012 ***Survey Date:*** 1999-06-09
Last Observed: 1999-06-09 ***First Observed:*** 1997-07-09 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Schuler; 13.5 km NW of.; Hwy 41; ~ 8 km W of.
General Description: 12off/on RoW i; in dry mixed grass prairie: Agro das, Care obt, Care ste, Symp occ (scattered), Arte lud. Assoc. species: Sisymon, Grin squ, Vici ame, Ther rho, Cala mon, Rati col, Comm pal, Stip vir, Koel mac, Vici ame, Bout gra.
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** U97AXY03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 556350 5587100 White Rock Coulee 5 & 12-15-17-2-W4 16 3913
Source Code Author Publisher Year Title
U97AXY03ABCA AXYS Environmental Consulting Ltd. 1997 AEC Suffield Pipeline
U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms
Date Source Abstract Code Observer Occurrence Data
1999-06-09 U99BUS02ABCA Dana Bush > 300 plants in an area 30 m x 15 m, 6 veg.; 10 reprod., some (20%) still in flower, some capsules (10%) open, in discrete patches on old pipe roach
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 013 ***Survey Date:*** 1995-06-02
Last Observed: 1995-07-17 ***First Observed:*** 1995-06-02 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Onefour, 15 km SE of; Hwy 48, 2.70 km W of; Rd to Onefour, 150 m S of.
General Description: Small drainage with temporal ponds at base of low slope. Heavily grazed (up to 80% blue gramma in patches). No moisture in depressions June 2, ponded at several locations July 17. Symph alb-Dart cana-Arte frigi-Rosa sp.-Bout gra-Stipa coma
Min Elev. (m): 876 ***Max Elev. (m):*** 876 ***Aspect:*** N
Other Comments: Desch cesp-Hord jub- Grind squa var.serrata-Grind squa var.quasiperennis-Therm rhom-Antparv-Cirs sp.-Erigeron sp. Gaura cocc-Orth lut-Ach mill-Ali text-Ast sp.-Gail arist-Lin lewis-Phlox hoodii-Ratibida columnifera ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 014 ***Survey Date:*** 1995-06-02
Last Observed: 1995-06-02 ***First Observed:*** 1995-06-02 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Cressday, 8.75 km SW of; Sage Creek, 100 m N on tributary of
General Description: Symphoricarpos occidentalis-Artemisia (prob cana.)-Equisetum arvense-Opuntia polyacantha-Potentilla anserina
Min Elev. (m): 900 ***Max Elev. (m):*** 900
Slope: 10.00 ***Aspect:*** sw ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552200 5446200 Sage Creek LS # 45-301.2-SW 26 12 8 4 18 3954
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 015 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Manyberries; ~32.5 km NE of; Sage Creek; ~9.25 km N of; road ~950 m N of.
General Description: S shore of wetland
Min Elev. (m): 1067 ***Max Elev. (m):*** 1067 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 535123 5482681 Sage Creek LS# 56; km:370.9; LLD: SW 29 6-4-4 19 4059
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 016 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Cressday; ~9 km SW of; Sage Creek on N side of.
General Description: 60m E of RoW, N of Sage Creek
Min Elev. (m): 899 ***Max Elev. (m):*** 899 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551775 5446400 Sage Creek LS#62; km:412.8; LLD:NW 36 2-3-4 31 4060
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 017 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Onefour; 15 km SE of; Hwy 48; 2.7 km W of; Road to Onefour; 150 m S of.
Min Elev. (m): 876 ***Max Elev. (m):*** 876
Other Comments: 10m W of RoW in 1995. Results of Mitigation: Off RoW. Population avoided. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552000 5433700 Milk River Lake LS#64,km:425.3,LLD:NW 14-24 1-3-4. 17 3956
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 018 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Buffalo Lake, 2.5 km SW of; Peigon Creek, 1.75 km
Min Elev. (m): 1090 ***Max Elev. (m):*** 1090 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 530249 5494206 Buffalo Lake LS# 54; km:358.7; LLD: SW 6-35 7-5-4 18 4031
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 019 ***Survey Date:*** 1927-07-04
Last Observed: 1927-07-04 ***First Observed:*** 1927-07-04 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Calgary; ~12.5 km SSE of; Hwy 2; ~2 km S of.
Min Elev. (m): 1097 ***Max Elev. (m):*** 1097 ***Best Source of Info:*** S27MOSNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S27MOSNMONCA01 Moss, E.H. NM 119580 1927-07-04
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 710550 5634050 DeWinton 1 4375
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 020 ***Survey Date:*** 1926-07-19
Last Observed: 1926-07-19 ***First Observed:*** 1926-07-19 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Sand Point; ~14.25 km SSW of; Shelter Point.
General Description: stony shore
Min Elev. (m): 213 ***Max Elev. (m):*** 213 ***Best Source of Info:*** S26RAUNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S26RAUNMONCA01 Raup, H.M. NM 310806 1926-07-19
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74L15 12 510200 6520800 Shelter Point 58 50' N, 110 50' W. 8 4377
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 021 ***Survey Date:*** 1914-10-06
Last Observed: 1914-10-06 ***First Observed:*** 1914-10-06 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Parallel Creek; ~2.9 km N of mouth of; Pelican River; ~4.2 km SSE of.
Min Elev. (m): 457 ***Max Elev. (m):*** 457 ***Best Source of Info:*** S14HARNMONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14HARNMONCA02 Harper, Francis NM 267874 1914-10-06
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83P15 12 397650 6184700 Athabasca River - Pelican Portage 1 4378
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 022 ***Survey Date:*** 1897-06-21
Last Observed: 1897-06-21 ***First Observed:*** 1897-06-21 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Rocky Mountains; Elbow River.
General Description: where water has laid in spring
Min Elev. (m): 1311 ***Max Elev. (m):*** 1311 ***Best Source of Info:*** S97MACNMONCA31
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S97MACNMONCA31 Macoun, J. NM 15034 1897-06-21
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J15 11 670600 5646600 Bragg Creek 24 1692
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 023 ***Survey Date:*** 1951-00-00
Last Observed: 1951-00-00 ***First Observed:*** 1951-00-00 ***Actual Mapping Precision (m):*** 1600 ***Precision Code:*** M
Directions: Astotin Lake; ~3.5 km W of; Good Hope; ~2.75 km NNE of.
General Description: large sand pit
Min Elev. (m): 700 ***Max Elev. (m):*** 700 ***Best Source of Info:*** SNDSHENMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
SNDSHENMONCA01 Shetler, Stanwyn G. & Karl J. Stone NM 297295 0000-00-00
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H10 12 373350 5949700 Elk Island-Good Hope 53 41' N, 112 55' W 103 4387
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 024 ***Survey Date:*** 1968-06-11
Last Observed: 1968-06-11 ***First Observed:*** 1968-06-11 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Mount William Booth, 7 km W of; Eliot Peak, 6 km SE of; Kootenay Plains.
General Description: grassy flat by roadside and edge of woods
Min Elev. (m): 1340 ***Max Elev. (m):*** 1340 ***Best Source of Info:*** S68DUMUAABCA24
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68DUMUAABCA24 Dumais, M.G., Anderson, K. UA 28532 1968-06-11 Y flowers; white flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C01 11 539900 5770600 Kootenay Plains 26 4481
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 025 ***Survey Date:*** 1999-06-17

Last Observed: 1999-06-17 ***First Observed:*** 1998-06-11 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S

Directions: Ross Lake, 4.5 km S of; North Milk River, ~4 km N of.

General Description: transition areas between riparian and slopes, occasional upland sites; aspect various, slope slight and moisture moderate; Rosa sp., Poa pratensis, Potentilla fruticosa, Juncus spp., Fragaria virginiana, Geum triflorum

Min Elev. (m): 1325 ***Max Elev. (m):*** 1370 ***Best Source of Info:*** U98ERN01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H02 12 359050 5440550 Ross Lake 7-2-22 W4M 28 5041

Source Code Author Publisher Year Title

U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey

U99ERN02ABCA Ernst, Reg 1999 Email to J. Gould

Date Source Abstract Code Observer Occurrence Data

1998-06-11 U98ERN01ABCA Reg Ernst 118 on one site, other scattered small populations; 118 flowering

1999-06-17 U99ERN02ABCA Reg Ernst in bloom

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 026 ***Survey Date:*** 1998-06-11

Last Observed: 1998-06-11 ***First Observed:*** 1998-06-11 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: North Milk River, 6 km N of; Ross Lake, ~2.5 km SE of.

General Description: transition area between riparian and slopes; Rosa sp., Poa pratensis, Potentilla fruticosa, Juncus spp., Fragaria virginiana, Geum triflorum

Min Elev. (m): 1310 ***Max Elev. (m):*** 1310 ***Best Source of Info:*** U98ERN01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H02 12 361000 5442775 Ross Lake 17-2-22 W4M 35 5048

Source Code Author Publisher Year Title

U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 027 ***Survey Date:*** 1999-08-17

Last Observed: 1999-08-17 ***First Observed:*** 1997-06-15 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: Cappon, 12.5 km NE of; Hwy 886, 8.75 km E of.

General Description: south end of ephemeral wetland in dry mixed grassland between buckbrush-Distichlis communities; Poa palu-Carex sp.-Dist str.; 2 degree slope

Min Elev. (m): 808 ***Max Elev. (m):*** 808

Management Comments: Stake boundaries around areas to be protected. ***Best Source of Info:*** U99GOL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72M02 12 523250 5650000 Cappon 11-32-23-05-W4M, Lat 51 0.15' Lon 110 40.10' 1 5330

Source Code Author Publisher Year Title

U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)

Date Source Abstract Code Observer Occurrence Data

1997-06-15 1 flowering adult

1999-08-17 U99GOL01ABCA 1 individual sighted

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 028 ***Survey Date:*** 1999-08-11

Last Observed: 1999-08-11 ***First Observed:*** 1999-08-11 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S

Directions: Schuler; ~13 km NW of.; Hwy 41; ~ 8.5 km W of. AEC compressor station, SW of.

General Description: in depressional wetland, narrow strip between Agro sca edge of wet depression and upland Stipa-Carex stenophyla community type; Agro smi, Agro sca, Stip vir, Care ste, Sisy mon; moderately well drained

Min Elev. (m): 808 ***Max Elev. (m):*** 808

Management Comments: Pipeline construction: this wetland has numerous rare species (Elan tri, Hype maj, Cent min, Lila sci reported in '97/98 ***Best Source of Info:*** U99BUS02ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72L08 12 555100 5585100 White Rock Coulee Lat 50 deg 24 min 98 sec, Long 110 deg 13 min 22 s W - 6-9-17-2-W4M 15 3908

Source Code Author Publisher Year Title

U99BUS02ABCA Bush, Dana 1999 Axys Environmental Consulting Ltd.- Rare Native Plant Report Forms

Date Source Abstract Code Observer Occurrence Data

1999-08-11 U99BUS02ABCA Dana Bush hundreds of plants; veg = 6, repr. = 8

Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 029 ***Survey Date:*** 2000-06-16
Last Observed: 2000-06-16 ***First Observed:*** 2000-06-16 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Kootenay Plains ER; Two O'clock Creek campground; slope above campsites
General Description: open forest of aspen-white spruce-(few) lodgepole pine/Shep can-Juni com-Roasa-Arct uva-graminoid-forb on dry sandy soil
Min Elev. (m): 1387 ***Max Elev. (m):*** 1387 ***Aspect:*** E
Other Comments: Det. by gp on Botany AB trip # 3: P Cotterill, J Posey, D Downing, etc. ***Best Source of Info:*** F00COT01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C01 11 539750 5768000 Kootenay Plains 29 6098
Source Code Author Publisher Year Title
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000
Date Source Abstract Code Observer Occurrence Data
2000-06-16 F00COT01ABCA Botany AB # 3 group ca. 12 plants scattered in sandy grassland along trail; flowers closed, perhaps post-mature
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 030 ***Survey Date:*** 2000-06-17
Last Observed: 2000-06-17 ***First Observed:*** 2000-06-17 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Kootenay Plains; trail to Siffleur Falls from S.F. staging area; across bridge over Siffleur R; small side channel near trail
General Description: grassy calcareous flat with almost continuous vegetation, alongside slow channel of river
Min Elev. (m): 1364 ***Max Elev. (m):*** 1364
Slope: 0.00
Other Comments: 1 or 2 plants seen; fls seemed closed despite full sun; det. by Botany AB # 3 group ***Best Source of Info:*** F00COT01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C01 11 542118 5766123 Kootenay Plains - Siffleur River 52 02 46/116 23 13 accord. to GPS reading 30 6099
Source Code Author Publisher Year Title
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000
Date Source Abstract Code Observer Occurrence Data
2000-06-17 F00COT01ABCA P Cotterill & Botany AB # 3 gp
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3
+++++++++++++++++++++++

Element Code: PMIRI0D180 ***Occurrence Code #:*** 031 ***Survey Date:*** 2000-06-16
Last Observed: 2000-06-16 ***First Observed:*** 2000-06-16 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Kootenay Plains; Whirlpool Pt; E side of road (W bank of N. Sask. River)
General Description: scattered in open Pinus flexilis forest; dry sandy soil
Min Elev. (m): 1400 ***Max Elev. (m):*** 1400 ***Size of Occurrence:*** ***Best Source of Info:*** F00COT01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83C01 11 536400 5761400 Kootenay Plains Ecological Reserve 22 2432
Source Code Author Publisher Year Title
F00COT01ABCA P. J. Cotterill 2000 Field Notes for 2000
Date Source Abstract Code Observer Occurrence Data
2000-06-16 F00COT01ABCA P Cotterill & Botany AB # 3 Group A few specimens, flowers closed up
Sisyrinchium septentrionale pale blue-eyed grass SRank: S2S3

***Spartina pectinata* prairie cord grass**

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: heads out in early July
Specific Search Strategies (if any): search along seasonal streams with alkali seepage and sandy substrates; appears to prefer more permanent water than other species

Element Occurrences:

Element Code: PMPOA5S090 ***Occurrence Code #:*** 001 ***Survey Date:*** 1991-07-28
Last Observed: 1991-07-28 ***First Observed:*** 1989-10-16 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: La Saline Natural Area.
General Description: Puccinella-Hordeum-Salicornia saline meadow, hygric but physiologically xeric.
Min Elev. (m): 240 ***Max Elev. (m):*** 240 ***Best Source of Info:*** S91TIMPPABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S89SCHUAABCA01 Schwarz, A. & B. Wright UA none 1989-10-06 Fruits
S91TIMPPABCA03 Timoney, K. PP 804 1991-07-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414
Source Code Author Publisher Year Title
R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area
Spartina pectinata prairie cord grass SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA5S090 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bowell; ~15km SW of; S. Saskatchewan River; on N shore of.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500219 5540404 Bowell SW 3-26 12-8-4 18 3960
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Spartina pectinata prairie cord grass SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA5S090 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Rush Lake; ~9.5km SE of; Buffalo Lake; ~2km SW of.
Min Elev. (m): 1120 ***Max Elev. (m):*** 1120 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 530249 5494206 Buffalo Lake LS# 54; km:358.7; LLD: SW 6-35 7-5-4 18 4031
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Spartina pectinata prairie cord grass SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA5S090 ***Occurrence Code #:*** 007 ***Survey Date:*** 1935-09-10
Last Observed: 1935-09-10 ***First Observed:*** 1935-09-10 ***Precision Code:*** M
Directions: Fort McMurray, near; Athabasca and Clearwater Rivers, near junction of
General Description: bank of Athabasca River
Min Elev. (m): 250 ***Max Elev. (m):*** 250 ***Size of Occurrence:*** ***Best Source of Info:*** SNDRAUNMONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
SNDRAUNMONCA01 Raup, Hugh M. NM 33897 1935-09-10
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74D11 12 476050 6287400 Fort McMurray 4 392
Spartina pectinata prairie cord grass SRank: S1
++++++++++++++++++++++++

Element Code: PMPOA5S090 ***Occurrence Code #:*** 008 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Old Channel Lake; Old Channel Lake spring; Sect. 32-Tp14-R5-W4M
General Description: vegetation around moder. saline spring and along uphill springline; moist ground
Min Elev. (m): 640 ***Max Elev. (m):*** 640
Other Comments: recommend protection of spring wetlands; no groundwater pumping for injection wells; ID not=Y because no specimen, c/b S gracilis
Management Comments: heavy cattle grazing in some springs; petroleum dev't on adjacent lands ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525000 5563000 Old Channel Lake Sect. 32-Tp14-R5-W4M; mapped as polygon 43 6009
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpubl report in-house
Spartina pectinata prairie cord grass SRank: S1

Spergularia salina salt-marsh sand spurry

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers in June
Specific Search Strategies (if any): search highest unvegetated shoreline in gravelly sandy alkali shores

Element Occurrences:

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1996-09-12
Last Observed: 1996-09-12 ***First Observed:*** 1980-08-08 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: La Saline Natural Area; on se corner of lake; Twp 93 Rge 10 W4: LSD 16 of 15
General Description: Xeric tufa dune, La Saline salt spring with Thellunginella saluginea & Aster ericoides.
Min Elev. (m): 250 ***Max Elev. (m):*** 250 ***Best Source of Info:*** S91TIMPPABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S80ALLPPABCA04 Allen, L., & P. McIsaac & M. Fairbarns. PP 186 1980-08-08
S91TIMPPABCA04 Timoney, K. PP 797 1991-07-28
S96SANUAABCA02 Sanderson, K. & S. Myers PP 1996-09-12 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74E04 12 469150 6325450 La Saline Natural Area LSD 16 7 414
Source Code Author Publisher Year Title
R91TIM01ABCA Timoney, Kevin P and Anne L. Robinson Alberta Forestry, Lands and Wildlife 1991 Biophysical Inventory of the La Saline Natural Area
Date Source Abstract Code Observer Occurrence Data
Very local-rare
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1986-06-25
Last Observed: 1986-06-25 ***First Observed:*** 1986-06-25 ***Precision Code:*** S
Directions: South Castle Road
General Description: Roadside, sandy outwash
Min Elev. (m): 1585 ***Max Elev. (m):*** 1585 ***Best Source of Info:*** U93ALL01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86ALLPPABCA11 Allen, L. & V. Loewen PP 187 1986-06-25
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82G01 11 705950 5454400 Castle River Site 40 315 638
Source Code Author Publisher Year Title
U93ALL01ABCA Allen, Lorna Natural & Protected Areas 1993 Southcastle Rare Plants Survey
Date Source Abstract Code Observer Occurrence Data
Rare-saline areas
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1983-07-28
Last Observed: 1983-07-28 ***First Observed:*** 1983-07-28 ***Precision Code:*** M
Directions: Auburndale
General Description: Saline depression
Min Elev. (m): 600 ***Max Elev. (m):*** 600 ***Best Source of Info:*** S83ALLPPABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S83ALLPPABCA05 Allen, L. PP 188 1983-07-28
S83ALLPPABCA06 Allen, L. PP 189 1983-07-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E02 12 516450 5876000 Auburndale 2 324
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1990-06-29
Last Observed: 1990-06-29 ***First Observed:*** 1990-06-29 ***Precision Code:*** S
Directions: Vauxhall Association grazing lease; GRP788335; Scope Field.
General Description: Sand flat; growing with Plantago elongata/Navarretia minima/Carex athrostachya/Alopecurus carolinianus/Polygonum watsonii/Veronica persica.
Min Elev. (m): 785 ***Max Elev. (m):*** 785 ***Size of Occurrence:*** 22.00
Management Comments: Depression could be fenced out to ensure seed set. Area not over utilised by livestock as it seldom would contain water. ***Best Source of Info:*** UNDESR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L04 12 438300 5547925 Hays 1 181
Source Code Author Publisher Year Title
UNDESR01ABCA Eastern Slopes Rangeland Consultants An Alopecurus carolinianus Walt. level depression near Vauxhall
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
numerous plants; fruiting
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1968-09-25
Last Observed: 1968-09-25 ***First Observed:*** 1968-09-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Milo, 3.5 km SW of; McGregor Lake, N end of, W shore of.
General Description: Near edge of lake; somewhat saline soil.
Min Elev. (m): 868 ***Max Elev. (m):*** 868 ***Best Source of Info:*** S68ALLALABCA17
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68ALLALABCA17 Allen, T. D. & R.G. Gschaid AL 2320 1968-09-25 Y fruiting
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I10 12 363500 5602150 McGregor Lake 1 1420
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1968-08-23
Last Observed: 1968-08-23 ***First Observed:*** 1968-08-23 ***Actual Mapping Precision (m):*** 1800 ***Precision Code:*** M
Directions: Beaverhill Lake area; Tofield, 3 km ENE of.
General Description: in low meadows; uncommon
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S68SAVPMABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68SAVPMABCA05 Savale, W.F. PM B68.9.2b 1968-08-23 Y fruits; uncommon
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H07 12 393000 5915000 Tofield 53 22/112 37 3 3220
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 750 ***Precision Code:*** M
Directions: Sage Creek; ~ 6 km W of; Milk River Lake; ~ 2.5 km NW of.
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551900 5433100 Milk River Lake LS#64;km426;LLD W 24 1-3-4 26 4003
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Milk River Lake; ~ 4.5 km NW of; Hwy 48; ~ 2.8 km W of; road to Onefour; 1 km S of.
General Description: RoW narrowed. No seed mix applied.
Min Elev. (m): 869 ***Max Elev. (m):*** 869 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 551906 5432881 Milk River Lake LS#65;km:425-432;LLD 6 1-2-4.Kp 425.9: 551926.7 to 551935.67 E; 5432995.61 to 5433044.76 N; NW 24-1-3-422 3965
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Spergularia salina salt-marsh sand spurry SRank: S2
+++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1965-08-11
Last Observed: 1965-08-11 ***First Observed:*** 1965-08-11 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Hay Camp; 4 km N of; Slave River; 1.5 km W of.
General Description: In muck of creek bed.
Min Elev. (m): 218 ***Max Elev. (m):*** 218 ***Best Source of Info:*** S65CODACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S65CODACONCA01 Cody, W.J. AC 529781 1965-08-11
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74M11 12 472875 6602400 Slave River 59 34' N,111-30'W 2 4122
Spergularia salina salt-marsh sand spurry SRank: S2
++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1992-07-19
Last Observed: 1992-07-19 ***First Observed:*** 1992-07-19 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Moose Lake, 4.5 km SE of; Lambert Creek, headwaters of, .75 km SW of, along mudflats of Harper Creek.
General Description: growing with Salicornia at edge of mud flats adjacent to sulphur spring.
Min Elev. (m): 274 ***Max Elev. (m):*** 274 ***Size of Occurrence:*** ***Best Source of Info:*** S92ALLPPABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S92ALLPPABCA01 Allen, L. PP 3567 1992-07-19 Y growing with Salicornia at edge of mud flats, beside sulphur deposits (L.A); seeds light brown, slightly winged (P.J.C)
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
84J01 11 656650 6451050 Harper Creek 1 5358
Date Source Abstract Code Observer Occurrence Data
1992-07-19 L. Allen blooming, flowers purple with some white
Spergularia salina salt-marsh sand spurry SRank: S2
++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1984-07-31
Last Observed: 1984-07-31 ***First Observed:*** 1984-07-31 ***Actual Mapping Precision (m):*** 800 ***Precision Code:*** M
Directions: Campbell Lake, 11.75 km NW of; Clearwater River, 1.25 km E of.
General Description: saline springs
Min Elev. (m): 360 ***Max Elev. (m):*** 360 ***Size of Occurrence:*** ***Best Source of Info:*** S84BLAAUABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S84BLAAUABCA01 Blackmore, D. G. and N. Barnes AU 84-1608 1984-07-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
74D10 12 522200 6288500 Clearwater River S32-89-4-W4M 4 5359
Spergularia salina salt-marsh sand spurry SRank: S2
++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Albert Lake; Paradise Valley, ca. 17 km NW of; Tp48-R4-W4M
General Description: sandy to muddy alkali shore of hypersaline lake
Min Elev. (m): 640 ***Max Elev. (m):***
Other Comments: Recommend.: retain as nat'l water body with suff. setback to reduce impact of cultiv. & runoff; reduce graz. press. on W shoreline
Management Comments: cultivn adjoins parts of lake tho' considerable natural buffer in many areas ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E01 12 536800 5890500 Albert Lake 2 4167
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA Cliff Wallis See report
Spergularia salina salt-marsh sand spurry SRank: S2
++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Altario south wetlands; 2.25 km NW of Altario; Sect. 23-Tp34-R2-W4M
General Description: in successive bands of halophytic plant communities surrounding hypersaline (unvegetated) ponds
Min Elev. (m): 732 ***Max Elev. (m):***
Other Comments: provincially significant populations
Management Comments: heavy grazing is degrading some of spring-fed wetland basins; no groundwater pumping recommended ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 556250 5753750 Altario Sec. 23-Tp34-R2-W4M 3 5943
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
1990-00-00 U90WAL01ABCA C Wallis See unpublished report
Spergularia salina salt-marsh sand spurry SRank: S2
++++++++++++++++++++++

Element Code: PDCAR0W0D0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1990-00-00
Last Observed: 1990-00-00 ***First Observed:*** 1990-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Altario north wetlands; 5.25 km NE of Altario
General Description: successive bands of halophytic vegetation along shore of hypersaline (unvegetated) ponds
Min Elev. (m): 701 ***Max Elev. (m):***
Other Comments: provincially significant populations
Management Comments: grazing has impact on spring-fed wetland basins; no groundwater pumping should occur ***Best Source of Info:*** U90WAL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72M16 12 559350 5757100 Altario Sect.31-Tp34-R1-W4M 4 5945
Source Code Author Publisher Year Title
U90WAL01ABCA Wallis, Cliff 1990 Reconnaissance Survey of Saline Wetlands and Springs in the Grassland-Parkland Region of Eastern Alberta
Date Source Abstract Code Observer Occurrence Data
U90WAL01ABCA C Wallis See unpublished report
Spergularia salina salt-marsh sand spurry SRank: S2

***Sphenopholis obtusata* prairie wedge grass**

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Wetland-Springs
Phenology: heads out in July
Specific Search Strategies (if any): search along edges of running water in springs or slightly more open areas within the springs

Element Occurrences:

Element Code: PMPOA5T030 ***Occurrence Code #:*** 001 ***Survey Date:*** 1935-07-22
Last Observed: 1935-07-22 ***First Observed:*** 1935-07-22 ***Precision Code:*** M
Directions: Lacombe
General Description: wet ground
Min Elev. (m): 861 ***Max Elev. (m):*** 861 ***Best Source of Info:*** S35BOLALABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35BOLALABCA01 Bolton, J.B. AL 3721 1935-07-22 Y headed
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A05 12 312800 5815225 Lacombe Twp 040 Rge 27 W4: NE24 9 2312
Sphenopholis obtusata prairie wedge grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 002 ***Survey Date:*** 1991-07-24
Last Observed: 1991-07-24 ***First Observed:*** 1991-07-24 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: McIntyre Ranch; Reed Lake, 0.5 km NE of.
General Description: wet mud in Hordeum jubatum zone toward edge of slough
Min Elev. (m): 1250 ***Max Elev. (m):*** 1250 ***Best Source of Info:*** S91HRAPMABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S91HRAPMABCA06 Hrapko, J.O., L.D. Laird, et al. PM B91.33.4 1991-07-24 Y panicles
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 368775 5449250 Reed Lake 9 927
Sphenopholis obtusata prairie wedge grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 005 ***Survey Date:*** 1950-08-10
Last Observed: 1950-08-10 ***First Observed:*** 1950-08-10 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Brocket; 5km E of.
General Description: abundant, but localized, in slightly moister portion of native prairie
Min Elev. (m): 1067 ***Max Elev. (m):*** 1067 ***Best Source of Info:*** S50DORACONCA32
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50DORACONCA32 Dore, W.G. & A.J. Breitung AC 109065 1950-08-10 abundant but localized
S50DORUAABCA10 Dore, W.G., Breitung, A.J. UA 2728 1950-08-10 Y old spikelets (i.e. straw colour); "abundant, but localized"
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H12 12 306100 5491650 Brocket 8 4138
Sphenopholis obtusata prairie wedge grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 006 ***Survey Date:*** 1980-07-19
Last Observed: 1980-07-19 ***First Observed:*** 1980-07-19 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Milk River Lake, SE end of, 1 km E of.; Wildhorse customs, 0.5 km N of.
General Description: In slough
Min Elev. (m): 887 ***Max Elev. (m):*** 887 ***Best Source of Info:*** S80AIKACONCA10
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S80AIKACONCA10 Aiken, S.G. & S. Darbyshire AC 301981 1980-07-19
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 557400 5428100 Wildhorse Customs 37 4350
Sphenopholis obtusata prairie wedge grass SRank: S2
++++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 007 ***Survey Date:*** 1926-07-25
Last Observed: 1926-07-25 ***First Observed:*** 1926-07-25 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Little Fish Lake, shore of.
General Description: sandy shore
Min Elev. (m): 905 ***Max Elev. (m):*** 905
Other Comments: spikelets present ***Best Source of Info:*** S26BRIUAABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S26BRIUAABCA03 Brinkman, A.H. UA 2725 1926-07-25 Y spikelets present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 415000 5692800 Little Fish Lake 9 4441
Sphenopholis obtusata prairie wedge grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 008 ***Survey Date:*** 1944-08-20
Last Observed: 1944-08-20 ***First Observed:*** 1944-08-20 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M
Directions: Calgary; Glencoe Club.
General Description: open slope
Min Elev. (m): 1097 ***Max Elev. (m):*** 1097 ***Best Source of Info:*** S44MCCUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44MCCUAABCA06 McCalla, W.C. UA 33490 1944-08-20 Y spikelets present but breaking up
S44MCCUAABCA07 McCalla, W.C., Campbell, A., Moss, E.H. UA 2726 1944-08-20 Y old spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 704750 5656900 Calgary - Glencoe 12 4453
Sphenopholis obtusata prairie wedge grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 009 ***Survey Date:*** 1956-08-25
Last Observed: 1956-08-25 ***First Observed:*** 1956-08-25 ***Actual Mapping Precision (m):*** 1500 ***Precision Code:*** M
Directions: Embarras, 5 km SW of; Oke, 2.5 km NNE of; Hwy 47.
General Description: gravelly slope, edge of lodgepole pine woods
Min Elev. (m): 1066 ***Max Elev. (m):*** 1066 ***Best Source of Info:*** S56HERUAABCA25
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S56HERUAABCA25 Hermann, F.J. UA 2727 1956-08-25 Y dehiscing spikelets
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83F07 11 502350 5903350 Oke 2 4473
Sphenopholis obtusata prairie wedge grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 010 ***Survey Date:*** 1997-08-25
Last Observed: 1997-08-25 ***First Observed:*** 1998-06-16 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Holmes Crossing, 2 km E of; Athabasca River, shore of.
General Description: in a river alder-shining willow-yellow willow-sandbar willow/Equisetum hyemale riparian point bar thicket onsilt and sand
Min Elev. (m): 609 ***Max Elev. (m):*** 609 ***Best Source of Info:*** R98TIM01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83J07 11 649650 6021150 "Pemmican Island" plot fa37 1 4521
Source Code Author Publisher Year Title
R98TIM01ABCA Timoney, Kevin and Anne Robinson. Alberta Environmental Protection 1998 A floristic and landscape survey of the Ft. Assiniboine Sandhills Wildland Park
Date Source Abstract Code Observer Occurrence Data
1997-08-25 R98TIM01ABCA Kevin Timoney & Anne Robinson there were a few individuals
Sphenopholis obtusata prairie wedge grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 011 ***Survey Date:*** 1979-08-22
Last Observed: 1979-08-22 ***First Observed:*** 1979-08-22 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Scandia, 9.5 km NW of; Bow River, W side of.
General Description: small spring on draw on valley slope; wet; marsh dominated by Calamogrostris neglecta, Scirpus americanus, Juncus balticus, Carex rostrata; asoc. spp. Aster hesperius, Helianthus nuttallii, Mentha arvensis
Min Elev. (m): 747 ***Max Elev. (m):*** 747
Slope: 7.00 ***Aspect:*** E ***Best Source of Info:*** S79BRAUAABCA08
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79BRAUAABCA08 Bradley, C. UA 84154 1979-08-22 Y spikelets present
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I08 12 416750 5573575 Bow River UTM 12 UVL 168 735; 5-16-16 W4M 3 4516
Sphenopholis obtusata prairie wedge grass SRank: S2
+++++++++++++++++++++++

Element Code: PMPOA5T030 ***Occurrence Code #:*** 012 ***Survey Date:*** 1980-00-00
Last Observed: 1980-00-00 ***First Observed:*** 1980-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Scollard, 9 km W of; Dry Island Buffalo Jump, picnic area.
General Description: along bank of river
Min Elev. (m): 710 ***Max Elev. (m):*** 710 ***Best Source of Info:*** U99WIL02ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P15 12 365200 5755450 Dry Island Buffalo Jump Provincial Park 1 5068
Source Code Author Publisher Year Title
U99WIL02ABCA Wilkinson, Kathleen 1999 Letter from K. Wilkinson to John Rintoul - at March 3, 1999
Sphenopholis obtusata prairie wedge grass SRank: S2

Stephanomeria runcinata rush-pink

Natural Region: Foothills Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Slopes-Badlands
Phenology: flowers in July
Specific Search Strategies (if any): search silty/sandy badlands, tops of valley rims, especially south-facing slopes

Element Occurrences:

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1990-07-11
Last Observed: 1990-07-11 ***First Observed:*** 1990-07-11 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Dinosaur Provincial Park; Viewpoint, below.
General Description: Southeast slope, dry prairie escarpment.
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Aspect:*** SE
Other Comments: ID by Bonnie Smith. ***Best Source of Info:*** S90ROMUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90ROMUCABCA02 Romuld, M. UC 49473 1990-07-11 Y 48 plants in population
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 462850 5622300 Dinosaur Provincial Park SE 1-21-12-W4Near Site 7. 4 243
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1990-08-02
Last Observed: 1990-08-02 ***First Observed:*** 1990-08-02 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Dinosaur Provincial Park.
General Description: West slope, dry.
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Aspect:*** W
Other Comments: ID by Bonnie Smith. ***Best Source of Info:*** S90ROMUCABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90ROMUCABCA03 Romuld, M. UC 49474 1990-08-02 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L11 12 470150 5621850 Dinosaur Provincial Park SW 2-21-11-W4; Site 47. 2 232
Source Code Author Publisher Year Title
U93ROM01ABCA Romuld, A. Margaret MSc thesis; University of Calgary 1993 An ecological land classification of Dinosaur Provincial Park, Alberta
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1990-08-22
Last Observed: 1990-08-22 ***First Observed:*** 1990-08-22 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Dinosaur Provincial Park; Waterfall Coulee.
General Description: South slope, dry.
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Aspect:*** S
Other Comments: ID by Bonnie Smith. ***Best Source of Info:*** S90ROMUCABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S90ROMUCABCA04 Romuld, M. UC 49472 1990-08-22 Y 63 plants in population
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 464650 5620350 Dinosaur Provincial Park Site 22 3 235
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 **Occurrence Code #:** 004 **Survey Date:** 1994-00-00
Last Observed: 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, on ravine crests of the
General Description: from xeric to very xeric sites on erosional barrens on river ravine crests
Min Elev. (m): 724 **Max Elev. (m):** 724 **Best Source of Info:** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 538200 5589600 South Saskatchewan River UTM WL 538200 / 5589600 3 206
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA and in Alberta
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 **Occurrence Code #:** 005 **Survey Date:** 1995-00-00
Last Observed: 1995-00-00 **First Observed:** 1994-00-00 **Precision Code:** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River
General Description: from xeric to very xeric sites from drained margins of a sandy glaciofluvial outwash plain depression.
Min Elev. (m): 724 **Max Elev. (m):** 724 **Best Source of Info:** U96MAC01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 538200 5589900 South Saskatchewan River UTM WL 538200 / 5589900 4 207
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Date Source Abstract Code Observer Occurrence Data
rare in SNWA and in Alberta
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 **Occurrence Code #:** 006 **Survey Date:** 1971-06-23
Last Observed: 1971-06-23 **First Observed:** 1971-06-23 **Actual Mapping Precision (m):** 2500 **Precision Code:** M
Directions: Dinosaur P.P., E end of.
General Description: Edge of large mesa; bare exposed shale slope.
Min Elev. (m): 762 **Max Elev. (m):** 762 **Aspect:** SW **Best Source of Info:** S71KONUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S71KONUCABCA02 Kondla, N. & H. Crawford UC 29145 1971-06-23 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L14 12 473650 5622775 Dinosaur Provincial Park 1 247
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 **Occurrence Code #:** 007 **Survey Date:** 1989-07-04
Last Observed: 1989-07-04 **First Observed:** 1989-06-30 **Actual Mapping Precision (m):** 250 **Precision Code:** S
Directions: Dinosaur P.P.; Little Sandhill Creek, N slope of.
General Description: along valley slopes; scattered
Min Elev. (m): 663 **Max Elev. (m):** 663 **Size of Occurrence:** 0.01
Other Comments: Beth Cornish, field survey; two sites (SR-1, SR-2) surveyed 1989-06-30; and SR-3 and SR-4 1989-07-04.
Best Source of Info: U96SMI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 461850 5621400 Little Sandhill Creek NW1/2 Sec. 36 T20 R12 W4M; sites SR-1, SR-2, SR-3, SR-4 7 238
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Date Source Abstract Code Observer Occurrence Data
1989-06-30 U96SMI01ABCA Beth Cornish one site 18, second 50 plants; 0.002+0.0012 ha; 10%+30% flower
1989-07-04 U96SMI01ABCA Beth Cornish one site 115, second 29 plants; 0.004+0.003 ha; 40%+30% in flower.
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1989-07-17
Last Observed: 1989-07-17 ***First Observed:*** 1989-07-17 ***Actual Mapping Precision (m):*** 300 ***Precision Code:*** M
Directions: Dinosaur P.P.; Bus Tour Trail, S end of, near.
General Description: scattered and clumped
Min Elev. (m): 678 ***Max Elev. (m):*** 678
Other Comments: Berth Cornish field survey; three sites: SR-5, SR-6, SR-7 ***Best Source of Info:*** U96SMI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L12 12 464250 5621000 Dinosaur Provincial Park NE 1/4 Sec. 31 T20 R11 W4M; Sites SR-5, SR-6, SR-7 8 239
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Date Source Abstract Code Observer Occurrence Data
1989-07-17 U95SMI01ABCA Berth Cornish one site 3, second 22, third 17 plants; 0.0004+0,0012+0.0004 ha; 50%+30%+10% in flower; scattered+scattered+clumped.
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1989-07-19
Last Observed: 1989-07-19 ***First Observed:*** 1989-07-19 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Dinosaur P.P.; Badlands Trail, along; interpretative post #12, S of.
General Description: scattered
Min Elev. (m): 648 ***Max Elev. (m):*** 648
Other Comments: Berth Cornish field survey; Site SR-8. ***Best Source of Info:*** U95SMI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L13 12 464000 5622950 Little Sandhill Creek NE 1/4 Sec.6 T21 R11 W4M; Site SR-8 7 246
Source Code Author Publisher Year Title
U95SMI01ABCA Smith, Darrell 1995 Rare plant locations - Rocky/Clearwater Forest
Date Source Abstract Code Observer Occurrence Data
1989-07-19 U95SMI01ABCA Berth Cornish 6 plants; 0.0006 ha; 15% in flower.
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1994-00-00
Last Observed: 1979-07-04 ***First Observed:*** 1979-07-04 ***Actual Mapping Precision (m):*** 1100 ***Precision Code:*** M
Directions: Sage Creek, S of; BM 2989, 1.5 km SSE of.
General Description: eroding badland slopes
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Aspect:*** E
Other Comments: No specimens were found during the 1994 field season, but substantial suitable habitat was noted (Smith). ***Best Source of Info:*** S79WALUAABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79WALUAABCA07 Wallis, C. UA 84608 1979-07-04
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 552100 5445500 Sage Creek 2 2
Source Code Author Publisher Year Title
U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 011 ***Survey Date:*** 1993-08-27
Last Observed: 1993-08-27 ***First Observed:*** 1993-07-18 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Sage Creek, W of; BM 3429, 1.5 km W of.
General Description: steep badland slope
Min Elev. (m): 1044 ***Max Elev. (m):*** 1044
Other Comments: Wayne Smith (1993) states that populations of rush pink observed in this area represent the larges known in Alberta, possibly in Canada. ***Best Source of Info:*** U93SMI01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E08 12 538375 5465900 Sage Creek LSD 13 Sec.34 T4 R4 W4M 4 95
Source Code Author Publisher Year Title
U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 012 ***Survey Date:*** 1993-08-22

Last Observed: 1993-08-22 ***First Observed:*** 1993-08-08 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: Sage Creek, W of; BM 3429, 1.2 km SW of.

General Description: steep badland slopes

Min Elev. (m): 1059 ***Max Elev. (m):*** 1059

Other Comments: Wayne Smith (1993) states that populations of rush pink observed in this area represent the largest known in Alberta, possibly in Canada. ***Best Source of Info:*** U93SMI01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E08 12 538700 5465500 Sage Creek LSD 11 Sec. 34 T4 R4 W4M 5 96

Source Code Author Publisher Year Title

U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada

Stephanomeria runcinata rush-pink SRank: S2

++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 013 ***Survey Date:*** 1993-08-14

Last Observed: 1993-08-14 ***First Observed:*** 1993-08-08 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S

Directions: Sage Creek, NW of; Manyberries, 12 km NE of.

General Description: steep badland slopes

Min Elev. (m): 1143 ***Max Elev. (m):*** 1143

Other Comments: Wayne Smith (1993) states that populations of rush pink observed in this area represent the largest known in Alberta, possibly in Canada. ***Best Source of Info:*** U93SMI01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

72E07 12 533898 5474132 Sage Creek Site L3; LSD 14 Sec. 30 T5 R4 W4M 11 91

Source Code Author Publisher Year Title

U93SMI01ABCA Smith, Wayne Alberta Fish and Wildlife, Lethbridge, AB 1993 An Assessment of Short-horned Lizard Habitat and Use Manyberries Badland, Alberta U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada

Stephanomeria runcinata rush-pink SRank: S2

++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 014 ***Survey Date:*** 1994-00-00

Last Observed: 1986-07-06 ***First Observed:*** 1986-07-06 ***Actual Mapping Precision (m):*** 600 ***Precision Code:*** M

Directions: Chin Coulee, S side of; Wrentham, 9 km NNE of.

General Description: Koeleria macrantha/Poa secunda grasland and partially disturbed Agropyron cristatum, very loose soil, bare ground, stony and

silty clay, at edge of coulee, almost level terrain with slight north and east aspect; scattered

Min Elev. (m): 901 ***Max Elev. (m):*** 901 ***Aspect:*** NE ***Size of Occurrence:*** 0.02

Other Comments: Similar areas were checked to west and east along Chin Coulee but no plants were found. Smith (1994) visited this area but did not find any plants. Specimen should be in Alberta Provincial Museum. ***Best Source of Info:*** PNDWAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H09 12 417225 5493675 Chin Coulee NW 29-7-16-W4; 49 35/112 08 1 1351

Source Code Author Publisher Year Title

U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada

Date Source Abstract Code Observer Occurrence Data

1986-07-06 U96SMI01ABCA Cliff Wallis local population of 100 plants

Stephanomeria runcinata rush-pink SRank: S2

++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 015 ***Survey Date:*** 1986-07-15

Last Observed: 1986-07-15 ***First Observed:*** 1986-07-15 ***Actual Mapping Precision (m):*** 400 ***Precision Code:*** M

Directions: Oldman River, N shore of; Brocket, 5 km NW of.

General Description: south-facing eroding slope, along valley; general cover of Rhus trilobata, but little vegetation where S. runcinata plants are

growing; scattered

Min Elev. (m): 1052 ***Max Elev. (m):*** 1052 ***Aspect:*** S ***Size of Occurrence:*** 0.15

Other Comments: Extensive similar area east of this location weas examined but no plants were found (Wallis 1986 field information). Specimen should be in Alberta Provincial Museum. ***Best Source of Info:*** PNDWAL01ABCA

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #

82H12 12 296675 5493550 Brocket NW 13-7-29-W4; 49 34/113 49 6 1379

Source Code Author Publisher Year Title

U96SMI01ABCA Smith, Bonnie COSEWIC 1996 Status Report on the Rush Pink Stephanomeria runcinata in Canada

Date Source Abstract Code Observer Occurrence Data

1986-07-15 U95SMI01ABCA Cliff Wallis 30 plants were counted.

Stephanomeria runcinata rush-pink SRank: S2

++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 016 ***Survey Date:*** 1994-08-31
Last Observed: 1994-08-31 ***First Observed:*** 1994-08-31 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Mouth of White Rock Coulee; ~3.75 km NW of; S Saskatchewan River; ~500 m W of.
General Description: incised valley slope, subxeric barrens of Agropyron smithii, Artemisia frigida, A. campestris, Atriplex nuttallii, Hymenoxys richardsonii, Comandra unbellata pallida, Oryzopsis hymenoides, Rhus trilobata.
Min Elev. (m): 595 ***Max Elev. (m):*** 740 ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA14 Macdonald, I.D. PM B94.4.673 1994-08-31 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L08 12 540600 5589700 CFB Suffield 50-27'35"N/110-25'40"W 24 4330
Source Code Author Publisher Year Title
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 017 ***Survey Date:*** 1998-07-08
Last Observed: 1998-07-08 ***First Observed:*** 1998-07-08 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Chin, 11.5 km NNW 0f; Oldman River, 1.5 km S of.
General Description: dry/eroded exposed slope at W end of property; Machaeranthera canescens, Eriogonum flavum, Paronychia sessilifolia, Petalostemon candidum, Mirabilis hirsuta, Gutierrezia sarothrae
Min Elev. (m): 823 ***Max Elev. (m):*** 823 ***Aspect:*** SSW
Other Comments: land is currently privately owned and used strictly as a residence; grazing occurs a short distance away on the other side of a fence-line; specimen needed to confirm ID ***Best Source of Info:*** UNDCOR01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H16 12 392700 5524025 Chin 12 U 0392703/5524017 5 4568
Source Code Author Publisher Year Title
UNDCOR01ABCA Corbiere, Adrien & Don MacKay Rare Native Plant Survey Form
Date Source Abstract Code Observer Occurrence Data
1998-07-08 UNDCOR01ABCA Adrien Corbiere and Louise Thomas more than 50 plants flowering, at least 1 fruiting
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 018 ***Survey Date:*** 1999-06-14
Last Observed: 1999-06-14 ***First Observed:*** 1999-06-14 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Manyberries, 8 km E of, Manyberries Badlands, bench of badland slope
General Description: small, flat bench with some shale. Litte vegetation. Scattered Eriog fla, Arte cana, A.fili, Chry nau, Koeleria, Therm rho.
Min Elev. (m): 1030 ***Max Elev. (m):*** 1030
Management Comments: area of intensive PNG development ***Best Source of Info:*** F99ALL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 530450 5470050 Manyberries Badlands 42 5158
Source Code Author Publisher Year Title
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season
Date Source Abstract Code Observer Occurrence Data
1999-07-14 F99ALL01ABCA L. Allen about 100 plants, not blooming, buds just forming
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 019 ***Survey Date:*** 1999-06-14
Last Observed: 1999-06-14 ***First Observed:*** 1999-06-14 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Manyberries, 8 km E of, Manyberries Badlands, badland slope
General Description: gentle slope with Chry nau, Ther rho, Guti sar, Juni com, Rosa. About 95% bare ground
Min Elev. (m): 1030 ***Max Elev. (m):*** 1030 ***Aspect:*** 220
Management Comments: Area of intensive PNG development. ***Best Source of Info:*** F99ALL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 530750 5469025 Manyberries Badlands 43 5159
Source Code Author Publisher Year Title
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season
Date Source Abstract Code Observer Occurrence Data
1999-06-14 F99ALL01ABCA L. Allen about 12 plants in 4m x 2m area, not blooming, buds just forming
Stephanomeria runcinata rush-pink SRank: S2
++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 020 ***Survey Date:*** 1999-06-14
Last Observed: 1999-06-14 ***First Observed:*** 1999-06-14 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Manyberries, 8 km E of, Manyberries Badlands, bench of badland slope just above intermittent creek
General Description: flat bench with Eriog fla,Ther rho, Guti sar, Rosa,Coma umb, Agropyron. About 90% bare ground
Min Elev. (m): 1045 ***Max Elev. (m):*** 1045
Management Comments: Area of intensive PNG development. ***Best Source of Info:*** F99ALL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 530850 5473550 Manyberries Badlands 40 5160
Source Code Author Publisher Year Title
F99ALL01ABCA Allen, Lorna 1999 Field notes: 1999 field season
Date Source Abstract Code Observer Occurrence Data
1999-06-14 F99ALL01ABCA L. Allen about 100 plants, not blooming, buds just forming
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 021 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1997-07-00 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Cavendish, 6.25 km NNE of, Red Deer River, 225 m W of.
General Description: eroding soils on upper east bank of Red Deer River; exposed soils <50%; Stip com, Ruhl cus, Bout gra, Arte fri, Phlo hoo; very xeric; 15 degree slope
Min Elev. (m): 602 ***Max Elev. (m):*** 602
Slope: 15.00 ***Aspect:*** SW
Management Comments: Stake boundaries of areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 539475 5639275 Red Deer River 13-25-22-04-W4M, Lat 50 54.265' Lon 110 25.596' 24 5325
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna)
Date Source Abstract Code Observer Occurrence Data
1997-07-00 individuals; 6 on S bank; 15 on N bank; 5% flowering and 95% fruiting
1999-08-16 U99GOL01ABCA 6 individuals
Stephanomeria runcinata rush-pink SRank: S2
+++++++++++++++++++++++

Element Code: PDAST8U0C0 ***Occurrence Code #:*** 022 ***Survey Date:*** 1999-08-16
Last Observed: 1999-08-16 ***First Observed:*** 1999-08-16 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Cavendish, 6.25 km N of; Red Deer River, .75 km W of.
General Description: eroding soils on upper west bank of Red Deer River; eroding soils <50%; Stip com, Ruhl cus, Bout gra, Arte fri, Phlo hoo; very xeric; slope 15 degrees
Min Elev. (m): 663 ***Max Elev. (m):*** 663
Management Comments: Stake boundaries around areas to be protected. ***Best Source of Info:*** U99GOL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L16 12 539000 5639475 Red Deer River 16-26-22-04-W4M 25 5326
Source Code Author Publisher Year Title
U99GOL01ABCA Golder Associates & Boss environmental consulting ltd. 1999 Alberta Ethane Gathering System (AEGS) Looping Project - East Leg Conservation and Reclamation Plan vol. 2 (Empress to Hanna) U99GOL02ABCA Golder Associates 1999 Rare Native Plant Forms- Golder's survey along BP Amoco Alberta Ethane Gathering SystemPipeline right of way
Date Source Abstract Code Observer Occurrence Data
1999-07-00 U99GOL02ABCA 5% flowering, 95% fruiting
1999-08-16 U99GOL01ABCA 15 individuals
Stephanomeria runcinata rush-pink SRank: S2

***Suaeda moquinii* Moquin's sea-blite**

Natural Region: Dry Mixedgrass
Habitat: Slopes-Badlands
Phenology: shrubby, observable throughout the growing season
Specific Search Strategies (if any): occurs on softer shale badland slopes, often the only plant growing there

Element Occurrences:

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1968-09-11
Last Observed: 1968-09-11 ***First Observed:*** 1968-09-11 ***Precision Code:*** M
Directions: Milk River Coulee; P.M.A.A. Pronghorn Exhibit Site, near.
General Description: On dry eroded slopes with Sarcobatus.
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Aspect:*** E ***Best Source of Info:*** S68SAVPMABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S68SAVPMABCA01 Savale, W.F. PM B68.17.7 1968-09-11 fairly common; Vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 507423 5442084 Milk River Coulee Lat/Long: 49 08'/ 110 55' 6 17
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1986-06-11
Last Observed: 1986-06-11 ***First Observed:*** 1986-06-11 ***Precision Code:*** M
Directions: Orion, SW of; Pakowki Lake, NE shore of.
General Description: Sandy mud at water's edge of intermittent prairie lake.
Min Elev. (m): 880 ***Max Elev. (m):*** 880 ***Best Source of Info:*** S86HRAPMABCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86HRAPMABCA04 Hrapko, J.O. & W. M. Richards & R.B. Dickinson PM B86.127.26 1986-06-11 Vegetative
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509873 5471783 Pakowki Sand Dunes Lat/Long: 49 24/110 52 2 83
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1979-07-14
Last Observed: 1979-07-14 ***First Observed:*** 1979-07-14 ***Precision Code:*** M
Directions: Foremost, about 2 mi. N of; Hwy. 879.
General Description: Growing in saline area below dry eroded slopes.
Min Elev. (m): 884 ***Max Elev. (m):*** 884 ***Aspect:*** 0
Other Comments: Det. by K. Tannas; specimen housed at E.S.R.C. herbarium. ***Best Source of Info:*** UNDTAN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E11 12 467623 5484009 Chin Coulee 1 147
Source Code Author Publisher Year Title
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
several sporadically occurring individuals; vegetative and flowering
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, 36 km W of
General Description: 14 plants; 6 were avoided. Badlands on south bank of S. Sask. River. Infected seed collected from 10 plants-not reseeded.
Min Elev. (m): 671 ***Max Elev. (m):*** 671
Other Comments: Actual UTM's are 500107.60E, 5540888.35N but location description says on South bank therefore this EO was combined with 72L02 dot 19. ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500327 5540006 S.Sask. River NW 14-23 12-8-4; LS # 46, 301.2 km, LLD NW 23 12-8-4 19 3969
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bowell; ~15km SW of; S Saskatchewan River; on N shore of.
General Description: 34 plants within an extra workspace: 24 plants were avoided. 200 plants 30 M W of RoW, 45 plants E of Row. Badlands on N bank of S. Sask. River. Seed collected and re-seeded.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 500562 5539450 S. Saskatchewan River LS#46;km:302.1;LLD:NW 23 12-8-4 20 4012
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Fitzgerald; ~6m SE of.
General Description: E side of side coulee; Robinson Coulee. Off RoW. Population avoided.
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E15 12 517000 5521650 Fitzgerald LS# 49, Km 328, SW 6-28-10-6-4 22 4077
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1969-08-12
Last Observed: 1969-08-12 ***First Observed:*** 1969-08-12 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Milk River (town), 15 km E of; Hwy 501, N of.
General Description: On slope of eroded hill - heavy clay soil. Scattered plants, not seen elsewhere on badland.
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S69BASACONCA04
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S69BASACONCA04 Bassett, I.J. & B. Baum AC 601428 1969-08-12 scattered, not seen elsewhere on badland
S69BASACONCA05 Bassett, I.J. & B. Baum AC none 1969-08-12
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E04 12 437224 5443785 Highway 501 32 4156
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Lost River and USA border, 2 km ENE of.
General Description: locally dominant on softer shale in badlands
Min Elev. (m): 846 ***Max Elev. (m):*** 853 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 543050 5427750 Lost River 43 4544
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Suaeda moquinii Moquin's sea-blite SRank: S2
++++++++++++++++++++++++

Element Code: PDCHE0P0F0 ***Occurrence Code #:*** 010 ***Survey Date:*** 1985-00-00
Last Observed: 1985-00-00 ***First Observed:*** 1985-00-00 ***Actual Mapping Precision (m):*** 50 ***Precision Code:*** S
Directions: Lost River Valley, E slope of; USA border, 2.5 km N of.
General Description: locally dominant on softer shale in bedlands
Min Elev. (m): 838 ***Max Elev. (m):*** 892 ***Best Source of Info:*** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540375 5429600 Lost River 53 4554
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Suaeda moquinii Moquin's sea-blite SRank: S2

Suckleya suckleyana poison suckleya

Natural Region: Dry Mixedgrass
Habitat: Wetland-Alkali
Phenology: flowers in June
Specific Search Strategies (if any): possibly prefers a sandy component, e.g. ephemeral sandy streams; occasionally weedy on disturbed sites

Element Occurrences:

Element Code: PDCHE0Q010 ***Occurrence Code #:*** 001 ***Survey Date:*** 1952-06-28
Last Observed: 1952-06-28 ***First Observed:*** 1952-06-28 ***Precision Code:*** M
Directions: Manyberries, 8 mi. S of; Ruisseau Ketchum (Lower bank of Ketchum Creek), rivage desseche du (Ketchum Creek, dried shore of ?).
General Description: Rivage desseche(dried shore).
Min Elev. (m): 899 ***Max Elev. (m):*** 899 ***Best Source of Info:*** S52BOIUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S52BOIACONCA07 Boivin, B. & J.F. Alex AC 131994 1952-06-28
S52BOIUAABCA12 Boivin, Bernard & J.F. Alex UA 73634 1952-06-28 Y flowers; plants all very young, still with seed leaves, and small
S52BOIUCABCA02 Boivin, B. & J.F. Alex UC 09456 1952-06-28
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 523273 5459983 Ketchum Creek 6 87
Suckleya suckleyana poison suckleya SRank: S1
++++++++++++++++++++++

Element Code: PDCHE0Q010 ***Occurrence Code #:*** 003 ***Survey Date:*** 1964-06-16
Last Observed: 1964-06-16 ***First Observed:*** 1964-06-16 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Barnwell.
General Description: Low spot in sugarbeet field.
Min Elev. (m): 830 ***Max Elev. (m):*** 830 ***Best Source of Info:*** S64SEXALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S64SEXALABCA02 Sexsmith, J.J. AL 4077 1964-06-16 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H16 12 409525 5513000 Barnwell 4 1409
Suckleya suckleyana poison suckleya SRank: S1
++++++++++++++++++++++

Element Code: PDCHE0Q010 ***Occurrence Code #:*** 004 ***Survey Date:*** 1950-08-07
Last Observed: 1950-08-07 ***First Observed:*** 1950-08-07 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: New Dayton.
General Description: Low spot in grain field.
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Best Source of Info:*** S50SEXALABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50SEXALABCA02 Sexsmith, J.J. AL 4075 1950-07-07 Y
S50SEXALABCA03 Sexsmith, J.J. AL 1938 1950-07-07 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H08 12 399500 5475575 New Dayton 4 1350
Suckleya suckleyana poison suckleya SRank: S1
++++++++++++++++++++++

Element Code: PDCHE0Q010 ***Occurrence Code #:*** 005 ***Survey Date:*** 1950-08-07
Last Observed: 1950-08-07 ***First Observed:*** 1950-08-07 ***Actual Mapping Precision (m):*** 1000 ***Precision Code:*** M
Directions: Craddock, 10 km E of; Tyrell Lake, 7 km N of; Etzikom Coulee, 6 km W of.
General Description: Along roadway through field. Not abundant
Min Elev. (m): 960 ***Max Elev. (m):*** 960 ***Best Source of Info:*** S50SEXACONCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S50SEXACONCA01 Sexsmith, J. AC none 1950-08-07 not abundant
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H08 12 405500 5479800 Eitzikom Coulee 13-6-18-W4M 6 4129
Suckleya suckleyana poison suckleya SRank: S1

Thelesperma subnudum var marginatum **greenthread**

Natural Region: Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers in June
Specific Search Strategies (if any): at top edges of valley where there is some eroding sand

Element Occurrences:

Element Code: PDAST980A1 ***Occurrence Code #:*** 001 ***Survey Date:*** 1895-08-09
Last Observed: 1895-08-09 ***First Observed:*** 1895-08-09 ***Actual Mapping Precision (m):*** 5000 ***Precision Code:*** G
Directions: Madicine Hat
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S95MACNMONCA26
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S95MACNMONCA26 Macoun, J. NM 506860 1895-08-09
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525000 5542850 Medicine Hat 8 174
Thelesperma subnudum var marginatum greenthread SRank: S1
++++++++++++++++++++++

Element Code: PDAST980A1 ***Occurrence Code #:*** 002 ***Survey Date:*** 1997-06-16
Last Observed: 1997-06-16 ***First Observed:*** 1997-06-16 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Lethbridge; Oldman River Valley, E slope of; High Level Bridge, 750 m N of.
General Description: along an old cart trail running along ridgetop; Stipa spp., Koeleria, Agropyron smithii, Artemisia spp, Hymenoxys richardsonii.
Min Elev. (m): 890 ***Max Elev. (m):*** 890 ***Best Source of Info:*** U97ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H10 12 366275 5507250 Lethbridge 3TM 82732.68 5507961.26 19 3790
Source Code Author Publisher Year Title
U97ERN01ABCA Ernst, Reg 1997 Rare Native Plant Survey Forms
Date Source Abstract Code Observer Occurrence Data
1997-06-16 U97ERN01ABCA Reg Ernst 200-300 individuals
Thelesperma subnudum var marginatum greenthread SRank: S1

Townsendia exscapa low townsendia

Natural Region: Northern Fescue Grassland, Mixedgrass, Dry Mixedgrass
Habitat: Grassland-Sandy
Phenology: flowers in May
Specific Search Strategies (if any): difficult to detect past mid-June; valley rims where there is some eroding soil, especially sandy soils

Element Occurrences:

Element Code: PDAST9C060 ***Occurrence Code #:*** 001 ***Survey Date:*** 1965-05-28
Last Observed: 1965-05-28 ***First Observed:*** 1965-05-15 ***Precision Code:*** G
Directions: Lost River Coulee, Manyberries Range Station
General Description: dry exposed areas, stoney hillsides,gravelly, sandy soil
Min Elev. (m): 900 ***Max Elev. (m):*** 900
Other Comments: S65SMOALABCA01 & S65SMOALABCA02, ID = Y K.W. Oct 99 ***Best Source of Info:*** S65SMOALABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S65SMOALABCA01 Smoliak, S. AL 1965 1965-05-28 Y blooming
S65SMOALABCA02 Smoliak, S. AL 1965 1965-05-15 Y blooming
S65SMOALABCA03 Smoliak, S. UL 1965 1965-05-28 Y flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 538000 5433000 Lost River 6 5
Date Source Abstract Code Observer Occurrence Data
1965-05-15 Smoliak, S. blooming
1965-05-28 Smoliak, S. flowering
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 003 ***Survey Date:*** 1995-06-04
Last Observed: 1995-06-04 ***First Observed:*** 1995-06-04 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Rush Lake, 7.5km SEof bridge over E end of; Buffalo Lake, 1.75 km SW of.
General Description: Top of knob in ice ablation zone (knob and kettle topography). ***Size of Occurrence:*** ***Best Source of Info:*** B95WIL01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 529274 5495581 Buffalo Lake LS#54,km:357.2,LLD:SE 1-3 8-5-4 5 3957
Source Code Author Publisher Year Title
B95WIL01ABCA J. Williams Consulting & Axys Environmental Consulting Ltd. Express Pipelines Ltd 1995 Rare Plant Surveys along the Proposed Express Pipeline Project
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 004 ***Survey Date:*** 1996-00-00
Last Observed: 1996-00-00 ***First Observed:*** 1996-00-00 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Rush Lake; ~7.5 km SE of bridge over E side of; Buffalo Lake; ~2.5 km SW of.
General Description: Upland plains; off RoW, population avoided.
Min Elev. (m): 671 ***Max Elev. (m):*** 671 ***Best Source of Info:*** U96EXP01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E10 12 528374 5495681 Buffalo Lake LS#54; km: 356.6;LLD:SW 3 8-5-4 19 4062
Source Code Author Publisher Year Title
U96EXP01ABCA AXYS Environmental Consulting 1996 Express Pipeline Project
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 005 ***Survey Date:*** 1914-05-02
Last Observed: 1914-05-02 ***First Observed:*** 1914-05-02 ***Actual Mapping Precision (m):*** 2000 ***Precision Code:*** M
Directions: Rosedale
General Description: Bare grassy hills
Min Elev. (m): 686 ***Max Elev. (m):*** 686 ***Best Source of Info:*** S14MOOACONCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S14MOOACONCA02 Moodie, M.E. AC none 1914-05-02
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P07 12 386350 5697350 Rosedale 51 25/112 38 6 2285
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 009 ***Survey Date:*** 1934-05-06
Last Observed: 1934-05-06 ***First Observed:*** 1928-04-29 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Fort Macleod
General Description: dry soil
Min Elev. (m): 945 ***Max Elev. (m):*** 945
Other Comments: phenology ranges from flowers to remains of flowers to dehiscing fruit ***Best Source of Info:*** S28DIXUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S28DIXUAABCA02 Dixon, R.H. UA 19031 1928-04-29 Y phenology ranges from flowers to remains of flowers to dehiscing fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H11 12 327500 5510300 Fort Macleod 8 4444
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 010 ***Survey Date:*** 1942-05-14
Last Observed: 1942-05-14 ***First Observed:*** 1942-05-14 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Czar.
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** S42MOSUAABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S42JONUAABCA01 Jones, Edith UA 19030 1942-05-14 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D07 12 512000 5811000 Czar 3 4451
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 011 ***Survey Date:*** 1945-06-03
Last Observed: 1945-06-03 ***First Observed:*** 1945-06-03 ***Actual Mapping Precision (m):*** 1400 ***Precision Code:*** M
Directions: Hughenden.
Min Elev. (m): 716 ***Max Elev. (m):*** 716 ***Best Source of Info:*** S45DIXUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S45DIXUAABCA01 Dixon, Marjorie M. UA 19034 1945-06-03 Y remains of flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73D10 12 502000 5818225 Hughenden 52 31/110 59 47 4455
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 012 ***Survey Date:*** 1951-04-29
Last Observed: 1951-04-29 ***First Observed:*** 1951-04-29 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Ghost Lake, 6 km NNE of; Bow River; Ghost Dam, 1.5 km E of.
General Description: open bank of river
Min Elev. (m): 1143 ***Max Elev. (m):*** 1143 ***Best Source of Info:*** S51BREUAABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51BREUAABCA01 Brethour, A.C. UA 67145 1951-04-29 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O02 11 662000 5676300 Ghost Dam 2 4462
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 ***Occurrence Code #:*** 013 ***Survey Date:*** 1982-05-26
Last Observed: 1982-05-26 ***First Observed:*** 1982-05-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Brocket, 5 mi NW of; Oldman, River, S side of; in coniferous woodland, coniferous slope, W of; green bridge, E of.
General Description: coniferous woodland, ridge edge of E/W slopes, loose soil, open location & lower grassland slope, loose, dry, sandy soil
Min Elev. (m): 1036 ***Max Elev. (m):*** 1036 ***Aspect:*** N ***Best Source of Info:*** S82CAMULABCA07
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82CAMULABCA06 Campbell-Snelling and M. Chambers UL none 1982-05-20 ? starting to flower
S82CAMULABCA07 Campbell-Snelling and M. Chambers UL none 1982-05-26 Y starting to flower
S82CAMULABCA08 Campbell-Snelling and M. Chambers UL none 1982-05-26 Y flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H12 12 296100 5492900 Brocket 43 33/113 49 4 1377
Date Source Abstract Code Observer Occurrence Data
1982-05-20 Campbell-Snelling and M. Chambers starting to flower 1982-05-26 Campbell-Snelling and M. Chambers starting to flower
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++

Element Code: PDAST9C060 **Occurrence Code #:** 014 **Survey Date:** 1982-06-01
Last Observed: 1982-06-01 **First Observed:** 1982-06-01 **Actual Mapping Precision (m):** 250 **Precision Code:** S
Directions: Head-Smashed-In-Buffalo-Jump, south tip of; below first escarpment, by road.
General Description: grassland. **Aspect:** S **Best Source of Info:** S82CAMULABCA09
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82CAMULABCA09 Campbell-Snelling, J. and M. Chambers UL none 1982-06-01 Y flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H12 12 308650 5508900 Head Smashed In Buffalo Jump 49-43N/113-39W 3 1376
Date Source Abstract Code Observer Occurrence Data
1982-06-01 Campbell-Snelling, J. and M. Chambers flowering
Townsendia exscapa low townsendia SRank: S2
++++++++++++++++++++++++

Element Code: PDAST9C060 **Occurrence Code #:** 015 **Survey Date:** 1978-05-13
Last Observed: 1978-05-13 **First Observed:** 1978-05-13 **Actual Mapping Precision (m):** 2500 **Precision Code:** M
Directions: Old Man River Valley; Pincher Station, north of, on secondary highway.
General Description: open grassland.
Min Elev. (m): 1067 **Max Elev. (m):** 1097 **Aspect:** S **Best Source of Info:** S78COXULABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S78COXULABCA03 Coxson, D. UL none 1978-05-13 Y flowering
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H12 12 288500 5496750 Oldman River 11 6064
Date Source Abstract Code Observer Occurrence Data
1978-05-13 Coxson, D. flowering
Townsendia exscapa low townsendia SRank: S2

Tradescantia occidentalis **western spiderwort**

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers late June
Specific Search Strategies (if any): wide area searches in active dune and immediately adjacent area

Element Occurrences:

Element Code: PMCOM0B0F0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1999-06-29
Last Observed: 1999-06-29 ***First Observed:*** 1986-06-11 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Orion, 7.5 km SW of; Pakowki Sand Dunes.
General Description: very local in one interdune area protected on N, W & S. sides, slopes dominated by Rosa arkansana & Koeleria macrantha. Associates with other plants include Oryzopsis hymenoides; Stipa comata and Koeleria macrantha
Min Elev. (m): 800 ***Max Elev. (m):*** 880
Other Comments: three small subpopulations noted June 28 and 29, 1999
Management Comments: no known threats or concerns at present ***Best Source of Info:*** S90SMIUCABCA01

Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S86DICAUABCA02 Dickinson, R. and T. S. Bakshi AU 86-0822 1986-06-11 Y
S86HRAACONCA01 Hrapko, J.O. & M. E. Parker AC 577372 1986-07-20
S86HRAPMABCA02 Hrapko, J.O. & W. M. Richards & R.B. Dickinson PM B86.127.90a 1986-06-11
S86HRAPMABCA03 Hrapko, J.O. & M. E. Parker PM B86.140.1a 1986-06-11
S86HRAPMABCA08 Hrapko, J.O., W.M. Richards & R.B. Dickinson PM B86.127.90 1986-06-11 Y flower buds
S89HRAPMABCA01 Hrapko, J.O., W.M. Richards & R.B. Dickinson PM B89.13.7 1989-06-27 Y early flowers
S90SMIUCABCA01 Smith, B & G. Lewis UC 49458 1990-06-21 locally rather common; 210 in population; [bloom]

Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E07 12 509100 5471450 Pakowki Lake multipolygon 10 90

Source Code Author Publisher Year Title
F99GOU01ABCA Gould, Joyce 1999 Field Notes (the site is described)
U92SMI01ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Western Spiderwort Tradescantia occidentalis in Canada

Date Source Abstract Code Observer Occurrence Data
Buds 1999-06-29 J. Gould and P. Cotterill 27 plants observed; 3 in flower, 24 in bud; 3 in flower, 0 in bud (subpop. 1), 19 plants all in bud (subpop. 2), 5 plants all in bud (subpop. 3)
Tradescantia occidentalis western spiderwort SRank: S1

Tripterocalyx micranthus (Abronia micrantha) sand verbena

Natural Region: Dry Mixedgrass
Habitat: Sand Dunes
Phenology: flowers in July
Specific Search Strategies (if any): detectable in most seasons due to its distinctive leaves, flowers and fruits; search active silty dunes

Element Occurrences:

Element Code: PDNYC0G030 ***Occurrence Code #:*** 001 ***Survey Date:*** 1979-07-06
Last Observed: 1979-07-06 ***First Observed:*** 1979-07-06 ***Precision Code:*** S
Directions: Lost River, N of.
General Description: Xeric mixed grass prairie; stablized (alluvial) sand.
Min Elev. (m): 905 ***Max Elev. (m):*** 905 ***Best Source of Info:*** S79STGULABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S79STGULABCA01 STG UL none 1979-07-06 rare; Fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 533473 5436684 Lost River Lat/Long: 49 41'/ 110 35'; Lat/Long do not match Legals. 9 20
Source Code Author Publisher Year Title
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in Canada
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 002 ***Survey Date:*** 1972-07-06
Last Observed: 1972-07-06 ***First Observed:*** 1972-07-06 ***Precision Code:*** M
Directions: Wildhorse, 10 miles W of.
General Description: silty-sandy outwash on valley floor
Min Elev. (m): 845 ***Max Elev. (m):*** 845 ***Best Source of Info:*** S72SHAULABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72SHAULABCA05 Sharp, W.H. UL none 1972-07-06 Fruit
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 540000 5429600 Lost River Valley 3 3
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 003 ***Survey Date:*** 1994-00-00
Last Observed: 1995-00-00 ***First Observed:*** 1994-06-18 ***Precision Code:*** S
Directions: Canadian Forces Base Suffield National Wildlife Area; South Saskatchewan River, along eroded slope of; Whitco Road, eastern end of.
General Description: Occurs along submesic sites;on the eroded ***Slope:*** xeric barrens of Stip com, Cala lon, Bout gra, Arte can, Arte fri, Rhus tril, Opun pol
Min Elev. (m): 595 ***Max Elev. (m):*** 670
Management Comments: threatened by encroachment on active sand areas, but destabilization of dunes may be beneficial in the long term ***Best Source of Info:*** U97CWS01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S94MACPMABCA28 Macdonald, I.D. PM B94.4.124 1994-06-18 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L09 12 542500 5603400 Middle Sand Hills 50-34'55N/110-24'05"W 1 215
Source Code Author Publisher Year Title
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
U97CWS01ABCA Canadian Wildlife Service CWS 1997 Plant Database from Suffield Survey 1994-1995
Date Source Abstract Code Observer Occurrence Data
rare in SNWA, single plant
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 004 ***Survey Date:*** 1972-00-00
Last Observed: 1972-00-00 ***First Observed:*** 1972-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Medicine Hat, N of; Brush Flats, across river.
General Description: sand dunes
Min Elev. (m): 632 ***Max Elev. (m):*** 701 ***Best Source of Info:*** S73JOHPMABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S73JOHPMABCA02 Johnson, H. PM B73.69.76a 1973-07-22 Y fruits
S73JOHPMABCA03 Johnson, H. PM B73.69.76b 1973-07-22 Y fruits
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 527000 5566000 Brush Flats 7 173
Source Code Author Publisher Year Title
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in Canada
U96MAC01ABCA Macdonald, I.D. Canadian Wildlife Service, Environment Canada, Prairie and 1996 Vascular Flora of Canadian Forces Base Suffield National Wildlife Area
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 005 ***Survey Date:*** 1987-00-00
Last Observed: 1987-00-00 ***First Observed:*** 1987-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Bow Island, 3 km N of.
Min Elev. (m): 708 ***Max Elev. (m):*** 747
Slope: 747.00 ***Best Source of Info:*** U92SMI03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 450000 5533575 Bow Island 8 154
Source Code Author Publisher Year Title
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in Canada
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 006 ***Survey Date:*** 1987-00-00
Last Observed: 1987-00-00 ***First Observed:*** 1987-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Wolf Island, N accross river.
Min Elev. (m): 792 ***Max Elev. (m):*** 792 ***Best Source of Info:*** U92SMI03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 436550 5531000 Wolf Island 9 155
Source Code Author Publisher Year Title
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in Canada
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 007 ***Survey Date:*** 1987-00-00
Last Observed: 1987-00-00 ***First Observed:*** 1987-00-00 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Purple Springs, 2 km NE of.
Min Elev. (m): 800 ***Max Elev. (m):*** 800 ***Best Source of Info:*** U92SMI03ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E13 12 436900 5519675 Purple Springs 10 156
Source Code Author Publisher Year Title
U92SMI03ABCA Smith, Bonnie & Cheryl Bradley COSEWIC 1992 Status Report on the Sand Verbena Abronia micrantha in Canada
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 ***Occurrence Code #:*** 008 ***Survey Date:*** 1972-07-19
Last Observed: 1972-07-19 ***First Observed:*** 1972-07-19 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Old Channel Lake, 1 km N of; Brush Flats, 1 km S of.
Min Elev. (m): 655 ***Max Elev. (m):*** 655 ***Best Source of Info:*** S72JOHPMABCA03
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72JOHPMABCA03 Johnson, H. PM B72.39.26 1972-07-19 Y fruits, remains of flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72L02 12 525000 5564450 Old Channel Lake 50 14/110 39 10 176
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 **Occurrence Code #:** 009 **Survey Date:** 1985-05-28
Last Observed: 1985-05-28 **First Observed:** 1985-05-28 **Actual Mapping Precision (m):** 50 **Precision Code:** S
Directions: USA border, 8 km N of; Lost River Valley, E slope of.
General Description: active dune along river
Min Elev. (m): 899 **Max Elev. (m):** 899 **Best Source of Info:** S85WALUAABCA13
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S85WALUAABCA13 Wallis, C. UA 098376 1985-05-28 Y flowers; "very local"
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 535073 5435085 Lost River 20 31
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Tripterocalyx micranthus sand verbena SRank: S2
++++++++++++++++++++++

Element Code: PDNYC0G030 **Occurrence Code #:** 010 **Survey Date:** 1985-00-00
Last Observed: 1985-00-00 **First Observed:** 1985-00-00 **Actual Mapping Precision (m):** 50 **Precision Code:** S
Directions: USA border, 7.5 km N of; Lost River Valley, rim of.
General Description: active blowout
Min Elev. (m): 899 **Max Elev. (m):** 899 **Best Source of Info:** R86WER01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 536048 5434735 Lost River 33 4555
Source Code Author Publisher Year Title
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
Tripterocalyx micranthus sand verbena SRank: S2

Veronica catenata water speedwell

Natural Region: Foothills Fescue Grassland, Mixedgrass
Habitat: Wetland
Phenology: flowers in late July and August
Specific Search Strategies (if any): need to search deeper water or in drier years when streams dry up; mostly in flowing water, even if moving slowly

Element Occurrences:

Element Code: PDSCR20090 ***Occurrence Code #:*** 002 ***Survey Date:*** 1972-10-15
Last Observed: 1972-10-15 ***First Observed:*** 1972-10-15 ***Precision Code:*** S
Directions: Highwood River junction with Bow River
General Description: sand bar amongst pebbles
Min Elev. (m): 3125 ***Max Elev. (m):*** 3125
Other Comments: V. salina det. M.B. Hallworth ***Best Source of Info:*** S72JONUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S72JONUCABCA01 Jones, R. UC 23964 1972-10-15 [10% flower]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82I13 12 304250 5633000 Bow River 3 1424
Veronica catenata water speedwell SRank: S1S2
++++++++++++++++++++++

Element Code: PDSCR20090 ***Occurrence Code #:*** 003 ***Survey Date:*** 1944-09-22
Last Observed: 1944-09-22 ***First Observed:*** 1944-07-17 ***Precision Code:*** M
Directions: Midnapore; Fish Creek
General Description: partly submerged; upper part of stem above water; swiftly running water
Min Elev. (m): 1051 ***Max Elev. (m):*** 1051 ***Best Source of Info:*** S44MCCUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S44MCCUAABCA03 McCalla, W.C. UA 65190 1944-07-17 [flowers, immature fruit]
S44MCCUAABCA04 McCalla, W.C. UA 65189 1944-09-22 [fruits]
S44MCCUCABCA01 McCalla, W.C. UC 23963 1944-07-17 [50% flower, 50% fruit]
S44MCCULABCA01 McCalla, W.C. UL none 1944-07-17
S44TURUAABCA03 Turner, G.H. UA 64633 1944-07-17 [flowers]
S44TURUAABCA04 Turner, G.H. UA 64652 1944-07-17
S44TURUAABCA05 Turner, G.H. UA 64653 1944-07-17
S44TURUAABCA06 Turner, G.H. UA 15857 1944-07-17
S44TURUAABCA07 Turner, G.H. UA 64632 1944-07-17 [flowers, immature fruits]
S44TURUCABCA02 Turner, G.H. UC 23966 1944-07-17
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82J16 11 706250 5645800 Calgary - Midnapore 11 1705
Veronica catenata water speedwell SRank: S1S2
++++++++++++++++++++++

Element Code: PDSCR20090 ***Occurrence Code #:*** 004 ***Survey Date:*** 1977-07-26
Last Observed: 1977-07-26 ***First Observed:*** 1977-07-26 ***Precision Code:*** S
Directions: Inglewood Bird Sanctuary, NE corner
General Description: standing in 6" of water in lagoon
Min Elev. (m): 1030 ***Max Elev. (m):*** 1030
Other Comments: V. SALINA SCHUR ***Best Source of Info:*** S77BOYUCABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S77BOYUCABCA01 Boyle, J. UC 23962 1977-07-26 Y [flowers, immature fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82O01 11 710100 5657250 Calgary 17 1866
Veronica catenata water speedwell SRank: S1S2
++++++++++++++++++++++

Element Code: PDSCR20090 ***Occurrence Code #:*** 006 ***Survey Date:*** 1998-08-27
Last Observed: 1998-08-27 ***First Observed:*** 1998-08-27 ***Actual Mapping Precision (m):*** 100 ***Precision Code:*** S
Directions: Ross Lake, 3 km SE of; North Milk River, 3.5 km N of.
General Description: moist drainage gully; slope slight and high moisture; Veronica americana, Epilobium sp.
Min Elev. (m): 1280 ***Max Elev. (m):*** 1280 ***Aspect:*** SE ***Best Source of Info:*** U98ERN01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82H02 12 362350 5442700 Ross Lake 16-2-22 W4M 34 5047
Source Code Author Publisher Year Title
U98ERN01ABCA Ernst, Reg 1998 Ross Grassland Natural Area - Results of 1998 Rare Plant Survey
Date Source Abstract Code Observer Occurrence Data
1998-08-27 U98ERN01ABCA Reg Ernst 30 plants; 18 vegetative and 12 flowering
Veronica catenata water speedwell SRank: S1S2

Viola pedatifida crowfoot violet

Natural Region: Northern Fescue Grassland, Foothills Fescue Grassland
Habitat: Grassland-Sandy
Phenology: flowers in May and early June
Specific Search Strategies (if any): shows a distinct preference for burned areas; lusher sandy grasslands are preferred withe some open sandy soil exposed

Element Occurrences:

Element Code: PDVIO041J0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1982-05-29
Last Observed: 1982-05-29 ***First Observed:*** 1982-05-29 ***Precision Code:*** M
Directions: Buffalo Lake Narrows, S of; Mirror, 5 km SE of.
General Description: Grassland, level slope, well drained.
Min Elev. (m): 795 ***Max Elev. (m):*** 795 ***Best Source of Info:*** S82JOHCFABCA01
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S82JOHCFABCA01 Johnson, J.D. CF 820081 1982-05-29 Flower
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A06 12 360250 5812650 Buffalo Lake 4 2316
Viola pedatifida crowfoot violet SRank: S2
+++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1970-06-15
Last Observed: 1970-06-15 ***First Observed:*** 1970-06-15 ***Actual Mapping Precision (m):*** 900 ***Precision Code:*** M
Directions: Little Fish Lake, 1 km W of.
General Description: Low-lying damp area in undisturbed Fescue grassland.
Min Elev. (m): 914 ***Max Elev. (m):*** 914 ***Best Source of Info:*** S70OWEUCABCA02
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S70OWEUCABCA02 Owen, Rob UC 18771 1970-06-15 Y blooming
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P08 12 411900 5692100 Little Fish Lake 8 2292
Viola pedatifida crowfoot violet SRank: S2
+++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 003 ***Survey Date:*** 1992-08-11
Last Observed: 1992-08-11 ***First Observed:*** 1992-08-11 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Road through Dry Island Buffalo Jump Provincial Park, 1km SE of
General Description: dry mesic young forest of Populus tremuloides; aspen parkland region of Red Deer River valley. Dry mesic meadow of Poa-Agrostis-Erigeron-Solidago-Virgulus-Thermopsis-Antennaria-Stipa- Agropyron.
Other Comments: 4 Replicates at IDM, UAC, PMAE, WAT./ 1 replicate (this prob. means this spec. at PM). ***Best Source of Info:*** S92MACPMABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S84LEEPMABCA20 Lee, P. PM B89.36.107 1984-07-05 Y
S92MACPMABCA06 Macdonald, Ian D., Getty, Mike PM B93.1.96 1992-08-11 Y
S92MACPMABCA07 Macdonald, Ian D, Getty, Mike PM B93.1.97 1992-08-11 Y
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
82P15 12 365650 5757500 Dry Island Buffalo Jump Provincial Park 51-57N/112-57W; SW 32-34-21-W4M 3 4266
Viola pedatifida crowfoot violet SRank: S2
+++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 004 ***Survey Date:*** 1951-06-09
Last Observed: 1951-06-09 ***First Observed:*** 1935-06-08 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Lacombe
General Description: dry prairie and open grassy slope
Min Elev. (m): 845 ***Max Elev. (m):*** 845 ***Best Source of Info:*** S51MCCUAABCA05
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35BOLUAABCA04 Bolton, J.L. UA 12803 1935-06-08 Y flowers
S51MCCUAABCA05 McCalla, W.C. UA 62080 1951-06-09 Y flowers, cleistogamous flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A05 12 312800 5815225 Lacombe Twp 040 Rge 27 W4: NE24 9 2312
Viola pedatifida crowfoot violet SRank: S2
+++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 005 ***Survey Date:*** 1935-06-08
Last Observed: 1935-06-08 ***First Observed:*** 1935-06-08 ***Actual Mapping Precision (m):*** 500 ***Precision Code:*** M
Directions: Sturgeon River, mouth of.
General Description: with grasses and small sedges
Min Elev. (m): 625 ***Max Elev. (m):*** 625 ***Best Source of Info:*** S35MOSUAABCA36
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S35MOSUAABCA36 Moss, E.H. UA 12802 1935-06-08 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H14 12 357000 5960000 Sturgeon River 1 3360
Viola pedatifida crowfoot violet SRank: S2
++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 006 ***Survey Date:*** 1997-08-20
Last Observed: 1997-08-20 ***First Observed:*** 1997-08-20 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Kinsella, 10 km NNW of; Lac Letendre, just E of.
General Description: disturbed ground; in association with Agropyron smithi, A. subsecundum, Poa pratensis, Muhlenbergia richardsonii, Danthonia californica
Min Elev. (m): 685 ***Max Elev. (m):*** 685 ***Best Source of Info:*** PNDVUJ01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
73E04 12 462600 5881500 Lac Letendre NW 28-47-11 W4M 1 4447
Viola pedatifida crowfoot violet SRank: S2
++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 007 ***Survey Date:*** 1943-06-01
Last Observed: 1943-06-01 ***First Observed:*** 1943-05-30 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Fort Saskatchewan.
General Description: dry sandy knolls, virgin prairie and prairie sod
Min Elev. (m): 617 ***Max Elev. (m):*** 617 ***Best Source of Info:*** S43TURUAABCA17
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S43TURUAABCA15 Turner, G.H. UA 61303 1943-05-30 Y flowers
S43TURUAABCA16 Turner, G.H. UA 61302 1943-05-30 Y flowers
S43TURUAABCA17 Turner, G.H. UA 61303 1943-06-01 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 355150 5953600 Fort Saskatchewan 8 4450
Viola pedatifida crowfoot violet SRank: S2
++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 008 ***Survey Date:*** 1947-05-19
Last Observed: 1947-05-19 ***First Observed:*** 1947-05-19 ***Actual Mapping Precision (m):*** 250 ***Precision Code:*** S
Directions: Fort Saskatchewan, pool elevator, near.
General Description: on open prairie roadside
Min Elev. (m): 625 ***Max Elev. (m):*** 625 ***Best Source of Info:*** S47TURUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S47TURUAABCA06 Turner, G.H. UA 61300 1947-05-19 Y buds, flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 353600 5953200 Fort Saskatchewan 33 4457
Viola pedatifida crowfoot violet SRank: S2
++++++++++++++++++++++

Element Code: PDVIO041J0 ***Occurrence Code #:*** 009 ***Survey Date:*** 1951-06-09
Last Observed: 1951-06-09 ***First Observed:*** 1951-06-09 ***Actual Mapping Precision (m):*** 2500 ***Precision Code:*** M
Directions: Red Deer and Blindman Rivers junction, 1 km NW of.
General Description: lightly wooded bank
Min Elev. (m): 840 ***Max Elev. (m):*** 840 ***Best Source of Info:*** S51MCCUAABCA06
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S51MCCUAABCA06 McCalla, W.C. UA 62082 1951-06-09 Y flowers
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83A05 12 311600 5804600 Red Deer R/Blindman R Junction 11 4463
Viola pedatifida crowfoot violet SRank: S2
++++++++++++++++++++++

Element Code: PDVIO041J0 **Occurrence Code #:** 010 **Survey Date:** 2000-05-25
Last Observed: 2000-05-25 **First Observed:** 2000-05-25 **Actual Mapping Precision (m):** 100 **Precision Code:** S
Directions: Fort Saskatchewan, S end of city; SW of new suburb of Westpark estates; ca. 1.5 km N of junction of Pointe-aux-pins Creek with N. Saskatchewan River
General Description: aspen parkland on ridge overlooking floodplain of river; cutline under power line; grassy slope on crest of knoll
Min Elev. (m): 617 **Max Elev. (m):** 617 **Aspect:** SW
Management Comments: land belongs to City of Ft. Saskatchewan; may be appropr. for recreational trails **Best Source of Info:** F00GOU01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S00GOUPPABCA01 J Gould, G Griffiths, P Cotterill, W Richards PP 3736 2000-05-25 Y Assoc. flora: Prun vir-Amel aln-Popu trem shrub layer; herb layer of Anem pat-Coma umb-Cera arv-Oxyt camp & var. graminoids
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
83H11 12 350223 5950452 Fort Saskatchewan converted GPS reading for NAD 83 350162 5950679 48 6063
Source Code Author Publisher Year Title
F00GOU01ABCA Gould, A. Joyce 2000 Field Notes for 2000
Date Source Abstract Code Observer Occurrence Data
2000-05-25 F00GOU01ABCA J Gould, G Griffiths, P Cotterill, W Richards ca. 14 plants on 1st slope & addtl 20 on S slope under power line ; P 26-30 of plant & habitat
Viola pedatifida crowfoot violet SRank: S2

Yucca glauca soapweed

Natural Region: Dry Mixedgrass
Habitat: Slopes-Sandy
Phenology: flowers late June
Specific Search Strategies (if any): only occurs in limited area in Canada; south-facing gravelly sandy slopes

Element Occurrences:

Element Code: PMAGA0B0F0 ***Occurrence Code #:*** 001 ***Survey Date:*** 1999-06-29
Last Observed: 1999-06-29 ***First Observed:*** 1984-12-06 ***Actual Mapping Precision (m):*** 10 ***Precision Code:*** S
Directions: Pinhorn Grazing Reserve, headquarters of, 6 km SE of.
General Description: On river "breaks" (on coulee branch of Milk River); covers about 150 m
Min Elev. (m): 975 ***Max Elev. (m):*** 975 ***Aspect:*** SW
Other Comments: Slide #F149.043; F149.044; F149.045; specimen housed at E.S.R.C. herbarium. ***Best Source of Info:*** F98GOU01ABCA
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E02 12 512073 5436984 Pinhorn candidate natural area 19 30
Source Code Author Publisher Year Title
F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season
I84MYE01ABCA Myers, S. 1984
I84MYE02ABCA Myers, S. 1984
I84MYE03ABCA Myers, S. 1984
U77MIL01ABCA Milner, Bruce J. Department of Botany, The University of Alberta 1977 Habitat of Yucca glauca Nutt. in southern Alberta U98CSO01ABCA Julius Csotonyi 1998 E-mail Julius Csotonyi to Joice Gould
UNDTAN01ABCA Tannas, K.E. Native Species Inventory Forms
Date Source Abstract Code Observer Occurrence Data
U77MIL01ABCA about 450 individuals
UNDTAN01ABCA K. Tannas several sporadically occurring individuals; a healthy population
Yucca glauca soapweed SRank: S1
++++++++++++++++++++++

Element Code: PMAGA0B0F0 ***Occurrence Code #:*** 002 ***Survey Date:*** 1999-06-28
Last Observed: 1999-06-28 ***First Observed:*** 1930-06-00 ***Actual Mapping Precision (m):*** 10 ***Precision Code:*** S
Directions: Onefour, 13 km SSE of; USA border.
General Description: about 2 km along eroded kame slopes; regosols, sandy texture, moderately alkaline; with Muhlenbergia cuspidata, Bouteloua gracilis; 61% veg cover.
Min Elev. (m): 845 ***Max Elev. (m):*** 884 ***Aspect:*** SE ***Best Source of Info:*** F98GOU01ABCA
Specimen Source Code Collector Herbarium Accession # Date ID OK? Observation Detail
S30CLAALABCA01 Clarke & Tisdale AL 409 1930-06-00
S31TISALABCA03 Tisdale, E.W. AL 486 1931-00-00
S35MOSUAABCA19 Moss, E.H. UA 5128 1935-07-13 Y [flowers]
S52BOIACONCA09 Boivin, B., W.A. Hubbard & J.F. Alex AC none 1952-06-28 Une seule colonie (a single colony)
S52BOIUAABCA04 Boivin, Bernard, W.A. Hubbard & J. F. AlexUA 22573 1952-06-28 Y single colony; [flowers]
S67ALLALABCA03 Allen, Gshaid, & Smoliak AL 2123 1967-07-00
S73GSCALABCA01 Gschaid, Smoliak, & Dalton AL 3066 1973-10-24
S73SMOALABCA04 Smoliak, Gschaid, & Allen AL 2868 1973-06-19
S77KOJCFABCA12 Kojima, S. CF 770233 1977-07-22 [fruits]
Map UTM Zone UTM Easting UTM Northing Survey Site Name Notes # Dot ID #
72E01 12 541350 5427775 Lost River 45 4546
Source Code Author Publisher Year Title
F98GOU01ABCA Gould, Joyce 1998 Field notes: 1998 field season
I79XXX02ABCA Unknown 1979
I81WER01ABCA Wershler, C. 1981
R86WER01ABCA Wershler C. & C. Wallis 1986 Lost River Significant Features Assessment
U77MIL01ABCA Milner, Bruce J. Department of Botany, The University of Alberta 1977 Habitat of Yucca glauca Nutt. in southern Alberta U98CSO01ABCA Julius Csotonyi 1998 E-mail Julius Csotonyi to Joice Gould
Date Source Abstract Code Observer Occurrence Data
U77MIL01ABCA 55,000 individuals
Yucca glauca soapweed SRank: S1